

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 32

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte TORU TSUKADA

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Appeal No. 1999-2755  
Application No. 08/599,105

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ON BRIEF

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Before McCANDLISH, Senior Administrative Patent Judge, and  
NASE and GONZALES, Administrative Patent Judges.

GONZALES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 5 and 11. Claims 2, 3, 6 and 7 have been objected to as depending from a non-allowed claim.

Claims 4 and 8 through 10 have been canceled.

We AFFIRM.

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BACKGROUND

The appellant's invention relates to a method of manufacturing a guide rail and a slide of a linear guide device. A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

In addition to the applicant's admitted prior art (hereinafter, "AAPA") (see the answer, page 2, citing the specification, pages 5 and 6), the examiner relies upon the following reference as evidence of obviousness:

Takahashi et al. (Takahashi)	5,356,255	Oct.
18, 1994		

Claims 1, 5 and 11 stand rejected under 35 U.S.C. § 103 as being unpatentable over the AAPA in view of Takahashi.<sup>1</sup>

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the answer (Paper No. 31) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 30) for the appellant's arguments

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<sup>1</sup> Rejections of claims 1, 5 and 11 under 35 U.S.C. § 103 as being unpatentable over the AAPA in view of Iijima or Scott et al. have been withdrawn by the examiner as indicated on pages 2 and 4 of the answer.

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thereagainst.

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In the brief (p. 3), the appellant indicates that the claims stand or fall together. Accordingly, in conformance with 37 CFR § 1.192(c)(7), we select claim 5 for review, and shall focus exclusively thereon, infra. The remaining claims will stand or fall with claim 5.

OPINION

In reaching our conclusion on the obviousness issue raised in this appeal, this panel of the Board has carefully considered the appellant's specification and claims, the AAPA, the applied patent,<sup>2</sup> and the respective viewpoints of the appellant and the examiner. As a consequence of our review, we make the determination which follows.

We sustain the rejection of the appellant's claim 5 under 35 U.S.C. § 103. It follows that the rejection of claims 1 and 11 is likewise sustained, since these claims stand or fall

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<sup>2</sup> In our evaluation of Takahashi, we have considered all of the disclosure of the reference for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 965, 148 USPQ 507, 510 (CCPA 1966). Additionally, this panel of the Board has taken into account not only the specific teachings, but also the inferences which one skilled in the art would reasonably have been expected to draw from the disclosure. See In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

with claim 5, as earlier indicated.

Claim 5 is drawn to a method of manufacturing a slider body of a linear guide device, the linear guide device including a guide rail and a slider having a body and a load rolling-element rolling groove, the method comprising the steps of grinding a groove surface of the load rolling-element rolling groove, preparing a protecting member, the protecting member being cylindrical and having a round surface, fitting the protective member to the groove surface with at least a portion of the round surface being brought in close contact with at least a portion of the groove surface, while surfaces of the slider adjacent the groove are not protected, and thereafter subjecting the slider body to rust-proofing surface treatment.<sup>3</sup>

Turning now to the evidence of obviousness, we are informed by the appellant's specification (pp. 5 and 6) that it was known in the art prior to his invention to manufacture a bearing slider by: machining a slider body to form mounting

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<sup>3</sup> According to the appellant's specification (pp. 19 and 20), the rust-proofing surface treatment is achieved by metal plating or by applying a film of resin on the surface to be protected.

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reference surfaces and load ball rolling grooves; subjecting the slider body to plating so as to form a rust-proofing layer over all the surfaces of the slider body including the mounting surfaces and grooves; and grinding the mounting surfaces and grooves, which for operating accuracy should not be plated, to remove the rust-proofing. We are further informed that the problem with the prior art method is that when the slider body is mounted on the grinder after the plating step, the surfaces of the slider body other than the mounting surfaces and the grooves may be damaged or the rust-proofing layer may be unintentionally removed.

As to the Takahashi document, this patent makes us aware that, at a time prior to the appellant's invention, it was known in the electrodeposition art to mask portions of an element prior to subjecting the element to electrodeposition in order to prevent the deposition of coating material on the portions so masked. Col. 2, ll. 3-10. For example, Takahashi teaches that it was well known in the art to use a masking plug of foamable material to mask the threaded bore of a nut prior to electrodeposition. In use, the plug was inserted into the threaded bore prior to electrodeposition of the nut

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and the nut was then heated to cause the foamable material to expand into the grooves of the threads. Id. at 44-51. It was also known, as evidenced by Takahashi, to fill the threaded bore of a nut with

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a sublimation solid prior to electrodeposition (id. at 51-53) or with a silicon rubber plug molded to fit within the threaded bore of the nut (col. 6, ll. 4-21).

In applying the test for obviousness,<sup>4</sup> this panel of the Board determines that it would have been obvious at the time the invention was made to one having ordinary skill in the art, from a collective assessment of the applied teachings, to fit a protective member to the surface of the groove formed in the slider body of the AAPA prior to rust-proofing following, for example, the teaching of Takahashi. In our opinion, the incentive on the part of one having ordinary skill in the art for making this modification would have simply been to gain the art recognized benefit of the masking step, as readily discerned from a review of the teachings of Takahashi.

Takahashi makes it apparent to us that one of the purposes of masking a surface prior to electrodeposition is to prevent the coating particles in an electrodeposition bath from adhering

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<sup>4</sup> The test for obviousness is what the combined teachings of references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

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to the masked surface during the electrodeposition coating  
process and, thus, eliminate

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the need to remove coating particles from the surface after the coating process is completed.

The arguments advanced in the brief relative to the obviousness rejection (pp. 4 through 6) do not convince us that the examiner erred in rejecting claim 5 under 35 U.S.C. § 103.

Contrary to the view of the appellant (brief, pp. 4 and 5), we consider the Takahashi document to be appropriate analogous prior art. Simply stated, it is our viewpoint that the appellant has an overly restrictive view of the teachings of the reference, focusing upon the particular item, i.e., the nut and panel assembly, in Takahashi undergoing electrodeposition. On the other hand, viewing the Takahashi document as a whole, and, of course, from the perspective of one having ordinary skill in the art, it is quite apparent to us that the disclosure of Takahashi is clearly reasonably pertinent to the problem addressed by the appellant, i.e., unwanted deposit of coating material on surface areas during an electrodeposition process. Hence, it is fairly viewed as analogous prior art. See In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1061 (Fed. Cir. 1992), and In re Wood, 599 F.2d

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1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

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It is also argued by the appellant that the AAPA and the Takahashi document are not combinable because they lack the requisite motivation or suggestion to combine them (brief, pp. 5 and 6). We do not share this view. As articulated, supra, we determined that the evidence of obviousness would have certainly provided ample incentive or motivation to one having ordinary skill in the art for combining the applied teachings.

Accordingly, we find that a prima facie case of obviousness has been established, which the appellant has not sought to rebut by any objective evidence of nonobviousness. In re Huang, 100 F.3d 135, 139, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996).

In summary, this panel of the Board has affirmed the decision of the examiner to reject claims 1, 5 and 11 under 35 U.S.C. § 103.

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

AFFIRMED

	)	
HARRISON E. McCANDLISH	)	
Senior Administrative Patent Judge	)	)
	)	
	)	
	)	BOARD OF PATENT
JEFFREY V. NASE	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
JOHN F. GONZALES	)	
Administrative Patent Judge	)	

JFG:hh

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