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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/743,930	05/03/2007	Martin H. Newman	P-6684C1C1	7811
23869	7590	01/25/2013	EXAMINER	
Hoffmann & Baron LLP 6900 Jericho Turnpike Syosset, NY 11791			PAYER, HWEI SIU CHOU	
			ART UNIT	PAPER NUMBER
			3724	
			MAIL DATE	DELIVERY MODE
			01/25/2013	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARTIN H. NEWMAN

Appeal 2010-012074
Application 11/743,930
Technology Center 3700

Before JAMES P. CALVE, HYUN J. JUNG, and
BART A. GERSTENBLITH, *Administrative Patent Judges*.

GERSTENBLITH, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Martin H. Newman (“Appellant”) appeals under 35 U.S.C. § 134 from the Examiner’s decision rejecting claims 1-9. We have jurisdiction under 35 U.S.C. § 6(b).

The Claimed Subject Matter

Claim 1 is representative of the claimed subject matter and is reproduced below.

1. A method for making an atomically sharp cutting edge for a cutting instrument, the method comprising:

providing a blank made of a metal material and having a major surface and a tapered edge at one end of the major surface;

depositing on a portion of the major surface at the tapered edge a continuous layer of a second material that is harder than the metal; and

milling the layer of the second material with a focused ion beam, without milling said major surface, to form the atomically sharp cutting edge.

References

The Examiner relies upon the following prior art references:

Henderson	US 4,534,827	Aug. 13, 1985
Janowski	US 5,488,774	Feb. 6, 1996
Trotta	US 5,497,550	Mar. 12, 1996
Alvis	US 5,727,978	Mar. 17, 1998
Cecere	US 5,747,818	May 5, 1998

Rejections

The Examiner makes the following rejections:

- I. Claims 1, 2, and 4-7 are rejected under 35 U.S.C. § 103(a) as unpatentable over Janowski and Alvis;
- II. Claim 3 is rejected under 35 U.S.C. § 103(a) as unpatentable over Janowski, Alvis, and Henderson;
- III. Claim 8 is rejected under 35 U.S.C. § 103(a) as unpatentable over Janowski, Alvis, and Trotta; and
- IV. Claim 9 is rejected under 35 U.S.C. § 103(a) as unpatentable over Janowski, Alvis, and Cecere.

SUMMARY OF DECISION

We AFFIRM.

OPINION

The central issue in this appeal is whether Janowski discloses “depositing on a portion of the major surface at the tapered edge a continuous layer of a *second material that is harder than the metal*” as required by each of the claims. *See* App. Br. 8-17 (emphasis added).

The Examiner concluded that the prior art rendered obvious the subject matter of the claims. Ans. 4-7. Specifically, the Examiner relied upon Janowski as disclosing “depositing on a portion of the major surface at the tapered edge a continuous layer . . . of a second material (i.e. ‘diamond-like carbon’, [sic] see the abstract) that is harder than the metal.” Ans. 4.

Appellant asserts that Janowski does not disclose a second material that is harder than the metal.¹ *See, e.g.*, App. Br. 9. Appellant contends that Janowski does not provide a basis to use a pure diamond coating and that Janowski makes clear that “graphite, and other non-diamond species, are to be included in the coating for their benefits.” *Id.* at 13.

Appellant acknowledges that “Janowski does not disclose the use of pure diamond coating with his invention, but rather, *discloses the possibility of forming such coating.*” Reply Br. 2 (emphasis added). And, Appellant further accepts that “it is clear that Janowski states the possibility of obtaining pure diamond coating, under the proper ‘reaction conditions’, [sic] with vapor phase deposition” even though Appellant asserts that Janowski prefers using a coating containing “graphite, as opposed to a pure diamond coating.” *Id.*

We agree with the Examiner that Janowski discloses “depositing on a portion of the major surface at the tapered edge a continuous layer of a *second material that is harder than the metal*” as required by each of the claims. Janowski specifically discloses the following:

According to the present invention there is provided a sharpened steel razor blade having, in the region of its ultimate edge, an adherent, low friction, shave facilitating *coating of diamond* or a diamondlike material.

Janowski, col. 2, ll. 41-44 (emphasis added). And, further states:

¹ With respect to Rejections II, III, and IV, Appellant asserts that the other references relied upon for those rejections do not “overcome the deficiencies” of Janowski. *See* App. Br. 15-17. Because Appellant has not argued any other rationale in response to Rejections II, III, and IV, our determination with respect to the disclosure of Janowski resolves the appeal with respect to all four rejections.

As mentioned hereinabove, the vapor phase deposition of carbon can, depending upon reaction conditions, *yield coatings ranging from essentially pure diamond* to mixtures containing, in addition to diamond, graphite and a variety of hard intermediate species generally referred to herein and in the prior art as ‘diamond-like’ carbon phases.

Id. at col. 4, ll. 45-50 (emphasis added). Janowski thus discloses that the vapor phase deposition of carbon can result in coatings of “essentially pure diamond.” *Id.*

Janowski also discloses that “[f]or the purposes of this invention . . . the presence of substantial quantities of non-diamond carbon species can be tolerated in the blade coating since the various diamondlike [sic] carbon phases provide shave enhancing benefits of the same order as diamond.” Janowski, col. 4, ll. 53-57. That Janowski “tolerate[s]” coatings that are not “essentially pure diamond” is irrelevant to the question of whether Janowski also discloses a coating of “essentially pure diamond.” As shown above, Janowski’s disclosure specifically includes a coating of “essentially pure diamond” and it is undisputed that “essentially pure diamond” is harder than the metal used to make Janowski’s blank. *See* Ans. 4, 8; *cf.* App. Br. 9. Thus, Appellant has not persuaded us of error in the Examiner’s finding that Janowski discloses “a second material that is harder than the metal” as required by the claims. Nor has Appellant apprised us of error with respect to the Examiner’s other findings or determination of obviousness.

DECISION

We affirm the Examiner’s decision rejecting claims 1-9 as obvious as reflected in Rejections I, II, III, and IV.

Appeal 2010-012074
Application 11/743,930

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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