

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THEODORE J. CAMPO, DONALD R. CHAULK, WILLIAM J. FELTON,
MANOHAR S. GREWAL, JOHN A. HINDLEY, JOHN F. KRANTZ,
MARK D. LINCOLN, KEVIN P. MC DONOUGH and JAMES W. WALSH

Appeal No. 96-3555
Application No. 08/297,021¹

ON BRIEF

Before FRANKFORT, McQUADE and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 18 through 20, 23, 26, 27, 29, 30 and 51 through 53. Claims 31 through 50 are withdrawn from consideration as drawn to a non-elected invention. Claims 1 through 17, 21, 22, 24, 25 and 28 have been canceled.

¹ Application for patent filed August 29, 1994. According to the appellants, the application is a division of Application No. 07/628,883, filed December 18, 1990, now U.S. Patent No. 5,399,204.

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We AFFIRM-IN-PART.

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BACKGROUND

The appellants' invention relates to a method of treating razor blades. Claims 51 and 52 are representative of the subject matter on appeal and a copy of those claims, as they appear in the appellants' brief, is attached to this decision.

The prior art references of record relied upon by the examiner as evidence of obviousness under 35 U.S.C. § 103 are:

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|------------------------|-----------|------|
| Clague et al. (Clague) | 2,746,466 | |
| May 22, 1956 | | |
| Grefe et al. (Grefe) | 3,498,257 | |
| Mar. 3, 1970 | | |
| Sastri | 3,811,189 | May |
| 21, 1974 | | |
| Tardoskegyi | 3,868,272 | |
| Feb. 25, 1975 | | |
| Weihe | 4,076,554 | Feb. |
| 28, 1978 | | |

Claims 18 through 20, 23, 26, 27, 29, 30 and 51 through 53 stand rejected under 35 U.S.C. § 103 as being unpatentable over Grefe in combination with Weihe, Clague, Sastri and Tardoskegyi.

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Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the § 103 rejection, we make reference to the examiner's answer (Paper No. 11, mailed June 26, 1996) for the examiner's complete reasoning in support of the rejection, and to the appellants' brief (Paper No. 10, filed April 1, 1996) and reply brief (Paper No. 12, filed August 2, 1996) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is sufficient to establish a prima facie case of obviousness only with respect to claim 51. Accordingly, we will sustain the examiner's rejection of claim 51 under 35 U.S.C. § 103. We will not sustain the examiner's rejection of claims 18 through 20, 23, 26, 27, 29, 30, 52 and 53 under 35 U.S.C. § 103. Our reasoning for this determination follows.

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In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Lintner, 9 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See In re Warner, 379 F.2d

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1011, 1017, 154 USPQ 173, 177 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. See, e.g., Grain Processing Corp. v. American Maize-Products Co., 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

With this as background, we turn to the examiner's rejection of independent claim 52 and claims 18 through 20, 23, 26, 27, 29, 30 and 53 dependent therefrom.

We agree with the appellants that all the limitations recited in independent claim 52 are not met by the combined teachings of the applied prior art (i.e., Grefe, Weihe, Clague, Sastri and Tardoskegyi). In particular, it is our opinion that the combined teachings of the applied prior art fail to teach or suggest moving a blade stack through a demagnetizing means and thereafter, moving the blade stack through a pre-wash station, a wash station, a rinse station and a final rinse station. In our

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view, Sastri's disclosure² of moving a blade stack through a demagnetizing means after the blade stack is cleaned by immersion in trichloroethylene, subjected to ultrasonic cleaning, rinsed in a mixture of acetone and methanol and cleaned in warm air³ would not have provided any suggestion, absent the appellants' teachings, to demagnetize the blade stack before the blade stack is cleaned. Demagnetizing the blade stack before the blade stack is cleaned insures that the blades are not attracted to one another, and therefore insures that the riffling of the blades will take place during the cleaning operation.⁴

In light of the foregoing, we will not sustain the standing § 103 rejection of independent claim 52 and dependent claims 18 through 20, 23, 26, 27, 29, 30 and 53.

We now turn to the examiner's rejection of independent claim 51. After considering the collective teachings of Grefe, Weihe and Clague, we agree with the examiner that the claimed invention

² The examiner relied exclusively on Sastri to suggest the recited step of moving the blade stack through a demagnetizing means (answer, pp. 5 and 7).

³ See column 3, lines 30-36, of Sastri.

⁴ See page 9, lines 8-12, of the specification.

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as defined by independent claim 51 would have been obvious to one of ordinary skill in the art at the time of appellants' invention. Thus, we regard the examiner's application of the teachings of Sastri and Tardoskegyi to be mere surplusage.⁵

Grefe discloses an apparatus for treating razor blades. The apparatus includes a blade holder 68 that will permit the stack of blades to riffle/flutter.⁶ A conveyor chain 22 moves the blade holder in the washer section 24 and dryer section 26.⁷

The examiner determined that Grefe failed to disclose moving the stack of blades through a pre-wash station, a wash station, a rinse station and a final rinse station and circulating the rinse and final rinse water to the pre-wash and rinse stations, respectively (answer, p. 4).

⁵ The examiner relied on Sastri for a teaching of demagnetizing a razor blade and relied on Tardoskegyi for a teaching of an air curtain (answer, pp. 4-5). However, these features are not recited in claim 51.

⁶ See column 5, lines 11-21 and 67-73, of Grefe.

⁷ See Figures 3-6 of Grebe.

Weihe discloses a process for cleaning articles carried on conveyor 22 through a dishwashing machine. The dishwashing machine utilizes a pre-wash zone 10, a wash zone 12 and a rinse zone 14. The primary water supply enters the machine through spray nozzle 32 in the rinse zone 14. Water draining from the rinse zone 14 is collected in sump 28 and pumped to spray nozzle 34 in the pre-wash zone 10.⁸

Clague discloses a conveyor dishwasher. The dishwasher has a pre-wash space 4, a wash space 5 and a rinse and sanitizing space 6. Fresh hot water is supplied through pipe 13 to rinsing and sanitizing devices 14 (located at the downstream end of the rinse and sanitizing space 6 as shown in Figure I and II). The used hot water is captured and recirculated in the rinse tank 12 which supplies water to the rinse spray tubes 8 (located at the upstream end of the rinse and sanitizing space 6 as shown in Figure I and II).⁹

Based on the teachings of Weihe and Clague, the examiner concluded that it would have been obvious to one of ordinary

⁸ See column 3, lines 1-26, of Weihe.

⁹ See column 2, lines 16-32, of Clague.

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skill in the art to modify Grefe to move the stack of blades through a pre-wash station, a wash station, a rinse station and a final rinse station and to circulate the rinse and final rinse water to the pre-wash and rinse stations, respectively (answer, p. 4).

Implicit in this rejection is the examiner's view that the above noted modification of Grefe would result in a method which corresponds to the method recited in claim 51 in all respects.

The test for obviousness is what the combined teachings of the 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). In this case, we are in agreement with the examiner that the combined teachings of Grefe, Weihe and Clague would have been suggestive to one of ordinary skill in the art at the time of appellants' invention of modifying Grefe's method of washing stacks of blades to include a pre-wash station, a wash station, a rinse station and a final rinse station and of circulating the rinse and final rinse water to the pre-wash and rinse stations, respectively, thereby providing a more efficient

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washing system as suggested by Weihe and Clague. The economic advantage of recirculating rinse water as well as providing stations for pre-wash, wash, rinse and final rinse are well known expedients in this art as shown by Weihe and Clague. Thus, contrary to the appellants' arguments, it is our view that the examiner did not engage in the use of impressible hindsight in rejecting claim 51.

We note that the appellants' arguments concerning (1) the separation of the zones from each other (brief, pp. 12 and 15), (2) the degree of cleanliness achieved (brief, pp. 12-13), (3) air curtains (brief, pp. 15-16), and (4) demagnetizing the blades (brief, pp. 16-17) are not commensurate in scope with claim 51. Additionally, as to the argued deficiencies of each reference on an individual basis, we note that nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. See In re Merck & Co. Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986).

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CONCLUSION

To summarize, the decision of the examiner to reject claims 18 through 20, 23, 26, 27, 29, 30, 52 and 53 under 35 U.S.C. § 103 is reversed and the decision of the examiner to reject claim 51 under 35 U.S.C. § 103 is affirmed.

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

AFFIRMED-IN-PART

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| CHARLES E. FRANKFORT |) | |
| Administrative Patent Judge |) | |
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| |) | BOARD OF PATENT |
| JOHN P. McQUADE |) | APPEALS |
| Administrative Patent Judge |) | AND |
| |) | INTERFERENCES |
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| |) | |
| |) | |
| JEFFREY V. NASE |) | |
| Administrative Patent Judge |) | |

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APPENDIX

51. A method of manufacturing a razor blade having a plurality of openings therein which includes the steps of: providing a holding fixture having a pair of rods each having one end fixed to an end support surface and one end free; stacking a plurality of blades on said fixture with the rods extending through the blade openings such that the blade edges are substantially at right angles to a continuous path of movement;

supporting the blades on the rods such that the blades are free to rattle under fluid pressure directed against the blade edges;

moving the stack of blades along the continuous path through a pre-wash station, a wash station, a rinse station and a final rinse station with the end support surface foremost during the blade movement;

applying a liquid to the stack of blades at each of the pre-wash, wash, rinse and final rinse stations, the application of liquid being directed at an angle and pressure to cause ruffling of the blades within the stack of blades;

providing the non-contaminated water for said application at the final rinse station;

circulating the applied water from the final rinse station to the rinse station for said application at the rinse station;
and

circulating the applied water from the rinse station to the pre-wash station for said application at the pre-wash station.

52. A method of manufacturing a razor blade which includes the steps of:

stacking a plurality of blades with the edges substantially at right angles to a selected continuous path;

supporting the blades such that the blades are free to riffle under fluid pressure directed against the blade edges;

providing a demagnetizing means along said path and moving the blade stack through said demagnetizing means to ensure separation of the blades during movement along said path;

thereafter, moving the stack at blades along the continuous path through a pre-wash station, a wash station, a rinse station and a final rinse station, each of said stations being separated by wall structure having an opening formed therein to provide for movement of the stack of blades therethrough and providing air under pressure adjacent said wall structure between said wash station, rinse station and final rinse station to form an air curtain adjacent each of the openings;

applying a liquid to the stack of blades at each of the pre-wash, wash, rinse and final rinse stations, the application being directed at an angle and pressure to cause riffling of the blades within the stack;

providing non-contaminated water for said application at the final rinse station;

circulating the applied water from the final rinse station to the rinse station for said application at the rinse station;
and

circulating the applied water from the rinse station to the pre-wash station for said application at the pre-wash station.

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APJ NASE

APJ FRANKFORT

APJ McQUADE

DECISION: **AFFIRMED-IN-PART**

Prepared By: Delores A. Lowe

DRAFT TYPED: 06 Aug 97

FINAL TYPED: