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12/861,077	08/23/2010	Srinivasan Damodaran	09820.897-P090393US02	1351
60961	7590	10/13/2020	EXAMINER	
Intellectual Property Dept./DeWitt LLP Wisconsin Alumni Research Foundation 2 East Mifflin Street, Suite #600 Madison, WI 53703-2865			WARDEN, JILL ALICE	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* SRINIVASAN DAMODARAN and AKSHAY ARORA

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Appeal 2019-001998  
Application 12/861,077  
Technology Center 1700

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Before JEFFREY T. SMITH, LINDA M. GAUDETTE, and  
KAREN M. HASTINGS, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> requests our review under 35 U.S.C. § 134(a) of the Examiner's Non-Final Action<sup>2</sup> rejecting claims 1, 2, 4, 5, 8, 9, 13, 15–17, 35, 41, and 44 under 35 U.S.C. § 103 as being unpatentable over at least the basic combination of Fox (US 2009/0053368 A1, published Feb. 26, 2009), Szuhaj (Bernard Szuhaj, *Bailey's Industrial Oil and Fat Products*, vol. 3, ch. 13, 366–368 (6th ed. 2005)), Eskin (N.A. Michael Eskin et al.,

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<sup>1</sup> We use the word “Appellant” to refer to the “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies Wisconsin Alumni Research Foundation as the real party in interest (Appeal Br. 2).

<sup>2</sup> Non-Final Action mailed Sept. 19, 2017.

*Biochemistry of Foods*, 546–547 (3rd ed. 2013)), and Conte (US 5,560,950, issued Oct. 1, 1996).<sup>3</sup>

We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We REVERSE.

Claim 1 is the only independent claim on appeal and is illustrative of the claimed subject matter:

1. A method for removing compounds that cause off-flavors in proteins, the method comprising:
  - treating a protein-containing solution comprising a phospholipid with a phospholipase to yield a hydrolytic byproduct of the phospholipid in the solution;
  - contacting the protein-containing solution with a cyclodextrin for a time wherein the cyclodextrin binds to the hydrolytic byproduct, thereby yielding a complex comprising the cyclodextrin bound to the hydrolytic byproduct; and then
  - separating the complex from the protein-containing solution.

(Claims Appendix 1).

#### ANALYSIS

The Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of

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<sup>3</sup> The Examiner applied additional prior art of Schwartz (Larry Schwartz, *Diafiltration for Desalting or Buffer Exchange*, Bioprocess Int’l, 43–44 (2003)) in a separate rejection of dependent claims 13 and 15–17 (Non-Final Act. 6–8), as well as Mikaelian (US 2003/0215559 A1, published Nov. 20, 2003) in a separate rejection of claim 44 (Non-Final Act. 10, 11). A discussion of these rejections is not necessary for the disposition of this appeal. The Examiner also withdrew the § 103 rejection of claims 39 and 43 in the Answer (Ans. 9).

obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), *quoted with approval in KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

After review of the respective positions provided by Appellant and the Examiner, we conclude that the preponderance of the evidence supports Appellant’s position that the Examiner has not established a prima facie case of obviousness for substantially the reasons set forth by Appellant in the Briefs. Accordingly, we reverse the Examiner’s § 103 rejections of all the claims on appeal.

Specifically, a preponderance of the evidence supports Appellant’s position that the proposed modification of Fox to add the absorbent and cyclodextrin of Conte and then separate out a cyclodextrin/absorbent/free fatty acid as shown in Conte would be based on undue speculation and an improper hindsight reconstruction for the reasons discussed by Appellant in the Briefs (Appeal Br. 5–9; Reply Br. 2–6). A preponderance of the evidence supports Appellant’s position that there is no apparent reason one of ordinary skill in the art would have looked at the process of Conte to reduce free fatty acids from used frying fat as the basis for modification of Fox’s process to make a corn protein concentrate. The fact finder must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 421 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966) (warning against a “temptation to read into the prior art the teachings of the invention in issue”)). As pointed out by Appellant, Fox adds cyclodextrin as a deodorizer and does not contemplate its separation from the corn protein concentrate (*e.g.*, Appeal Br. 4, 5; Reply Br. 4). The Examiner has not adequately explained why one would have formed and then “separat[ed] the

[cyclodextrin hydrolytic byproduct] complex from the protein” as recited in claim 1 in light of Fox’s teachings that the cyclodextrin is added as a deodorizer. Indeed, the cyclodextrin may even be “added to the finished CPC [protein] product” (*e.g.*, Fox ¶ 46). The Examiner has not adequately explained why the skilled artisan’s knowledge or inferences and creativity would have supported the obviousness determination based on the teachings of the applied references without undue speculation and/or an improper hindsight reconstruction of Fox’s method.

The Examiner does not establish that any of the additional references as applied in the § 103 rejections of claims 13, 15–17, and 44 cures these deficiencies and/or otherwise provides another rationale that cures these deficiencies.

Accordingly, we reverse the § 103 rejections of claims 1, 2, 4, 5, 8, 9, 13, 15–17, 35, 41, and 44 which all rely upon an impermissible hindsight reconstruction of the method described in Fox based on Conte.

#### DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 2, 4, 5, 8, 9, 35, 41	103	Fox, Szuhaj, Eskin, Conte		1, 2, 4, 5, 8, 9, 35, 41
13, 15–17	103	Fox, Szuhaj, Eskin, Conte, Schwartz		13, 15–17
44	103	Fox, Szuhaj, Eskin, Conte, Mikaelian		44

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<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
<b>Overall Outcome</b>				1, 2, 4, 5, 8, 9, 13, 15–17, 35, 41, 44

The Examiner's § 103 rejections of all the claims on appeal are reversed.

REVERSED