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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SVEN-RAINER DÖRING

Appeal 2019-004338
Application 14/839,202
Technology Center 1700

Before ADRIENE LEPIANE HANLON, LILAN REN, and
MERRELL C. CASHION JR., *Administrative Patent Judges*.

REN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–3, 6, 7, 9–11, and 13–24. *See* Final Act. 2, 10, 11, 12, 13. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as “DMK DEUTSCHES MILCHKONTOR GMBH.” Appeal Br. 4.

CLAIMED SUBJECT MATTER

“The invention is in the field of dairy products and relates to a process for the production of colourless vat milk as starting material for the production of colourless cheese.” Spec. ¶ 2. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A process for the production of colourless vat milk, comprising the steps of:
 - (a) subjecting vat milk to ultrafiltration using a membrane having a pore size of about 1,000 to about 50,000 Dalton to obtain a first permeate P1 and a first retentate R1;
 - (b) subjecting the first permeate P1 to a reverse osmosis using a membrane having a pore size of about 10 to about 1,000 Dalton to obtain a second permeate P2 and a second retentate R2;
 - (c) treating the second retentate R2 with an adsorbent to obtain a third retentate R2*; and
 - (d) combining the third retentate R2* with the first retentate R1 and the second permeate P2.

Claims Appendix (Appeal Br. 23).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Nagasawa	US 3,907,777	Sep. 23, 1975
Moeller	US 5,085,881	Feb. 4, 1992
Carver	US 5,549,830	Aug. 27, 1996
Norris	US 2002/0001651 A1	Jan. 3, 2002
Etzel	US 2003/0026845 A1	Feb. 6, 2003
Holst	US 2009/0092731 A1	Apr. 9, 2009
Tikanmaki	US 2010/0055286 A1	Mar. 4, 2010
Tossavainen	US 2011/0059220 A1	Mar. 10, 2011

REJECTIONS

Claims 1, 2, 9, 11, 13, 14, 16–18, 22, and 24 are rejected under 35 U.S.C. § 103 as being unpatentable over Tossavainen in view of Nagasawa, Moeller, and Carver. Final Act. 2.

Claims 3 and 19 are rejected under 35 U.S.C. § 103 as being unpatentable over Tossavainen in view of Nagasawa, Moeller, Carver, and Tikanmaki. Final Act. 10.

Claims 6 and 20 are rejected under 35 U.S.C. § 103 as being unpatentable over Tossavainen in view of Nagasawa, Moeller, Carver, and Holst. Final Act. 11.

Claims 7 and 21 are rejected under 35 U.S.C. § 103 as being unpatentable over Tossavainen in view of Nagasawa, Moeller, Carver, and Etzel. Final Act. 12.

Claims 10 and 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Tossavainen in view of Nagasawa, Moeller, Carver, and Koizumi. Final Act. 13.

Claim 15 is rejected under 35 U.S.C. § 103 as being unpatentable over Tossavainen in view of Nagasawa, Moeller, Carver, and Norris. Final Act. 13.

OPINION

We review the appealed rejections for error based upon the issues identified by Appellant and in light of the arguments and evidence produced thereon. *Cf. Ex parte Frye*, 2010 WL 889747, *4 (BPAI 2010) (precedential) (cited with approval in *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“[I]t has long been the Board’s practice to require an applicant to identify

the alleged error in the examiner’s rejections.”)). After having considered the evidence presented in this Appeal and each of Appellant’s contentions, we are not persuaded that reversible error has been identified, and we affirm the Examiner’s § 103 rejections for the reasons expressed in the Final Office Action and the Answer. We add the following primarily for emphasis.

*Claim 1*²

In rejecting claim 1, the Examiner finds that the prior art teaches or suggests every recited step. Final Act. 2–3. Appellant does not dispute that these steps are known in the art but argues instead that “none of the references cited by the Examiner relates to the process recited in Appellant’s claims.” Appeal Br. 15. More specifically, Appellant argues that Tossavainen is non-analogous art because it “is directed to the production of a lactose-free milk product” and “do[es] not even generally relate to a process of producing colorless vat milk by removing riboflavin” *Id.* at 15, 16.

Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.

In re Clay, 966 F.2d 656, 658–59 (Fed. Cir. 1992).

Appellant’s argument does not apply these criteria to address the Examiner’s findings and is therefore unpersuasive to show that the reference

² Appellant does not argue separately the patentability of any of claims 2, 9, 11, 13, 14, 16–18, 22, and 24 and they stand or fall with claim 1. *See* Appeal Br. 14–18; *see also* 37 C.F.R. § 41.37(c)(1)(vii).

is non-analogous. Appellant’s argument is unpersuasive because it does not address – and does not identify error in – the Examiner’s finding that the claims at issue are in the same field of endeavor as Tossavainen. *Compare* Appeal Br. 15–16, *with* Final Act. 15 (finding that Appellant’s field of endeavor is milk component separation processes). We further note that “*KSR* . . . directs us to construe the scope of analogous art broadly,” stating that “familiar items may have obvious uses beyond their primary purposes, and a person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010). Appellant’s argument that Tossavainen does not solve the same problem as the inventor here does not show sufficiently that Tossavainen is non-analogous art. Appeal Br. 15.

Appellant’s arguments with regard to the remaining references are likewise unpersuasive for failing to analyze whether the references are from the Appellant’s field of endeavor and reasonably pertinent to the problem with which the Appellant is involved. *See* Appeal Br. 17 (arguing instead that Nagasawa “relate[s] to the production of white lactose from whey” and does not “relate to a process of producing colorless vat milk”), 17 (arguing instead that Moeller does not “relate to a process of producing colorless vat milk”), 18 (arguing instead that Carver’s system “is completely different from the system subjected to reverse osmosis in the process” at issue).

Appellant also argues, without elaboration, that a skilled artisan would not have combined these references. Appeal Br. 16, 17. We are not persuaded first and foremost because such bare assertions do not serve as persuasive arguments for patentability. *See Microstrategy Inc. v. Business Objects Am.*, 238 F. App’x 605, 610 (Fed. Cir. 2007) (“The recitation of the

applicable law, however, does not prevent the waiver of an argument unless that recitation is accompanied by an explanation of how the law applies to the facts of the particular case.’’). We are not persuaded also because Appellant’s arguments do not address the Examiner’s rationale in support of the rejection. *Compare* Appeal Br. 16, 17, *with* Final Act. 3–4 (explaining, for example, that a skilled artisan would have combined Moeller and Nagasawa with Tossavainen based on Tossavainen’s teaching at paragraphs 14, 15, 60, and 62, the Nagasawa’s teaching 1:16–22 and 2:44–54, as well as Moeller’s teaching at 1:25–31).

The rejection of claims 1, 2, 9, 11, 13, 14, 16–18, 22, and 24 is sustained as a result.

Claims 7 & 21

Claim 7 depends from claim 1 and additionally recites “wherein the reverse osmosis (step b) is carried out at a temperature in the range from about 10 to about 55°C.” Claim 21 depends from claim 17 (which recites the identical steps (a) to (d) as claim 1) and recites the same.

The Examiner cites Etzel for the teaching that reverse osmosis may take place at “temperatures less than 40°C.” Final Act. 12 (citing Etzel ¶ 4). Appellant, on the other hand, argues that Etzel “criticize[s] a variety of isolation techniques such as reverse osmosis” and therefore teaches away from the recited reverse osmosis step. Appeal Br. 18.

Under the proper legal standard, a reference will teach away when it suggests that the developments flowing from its disclosures are unlikely to produce the objective of the applicant’s invention. A statement that a particular combination is not a preferred embodiment does not teach away absent clear discouragement of that combination.

Syntex (U.S.A.) LLC v. Apotex, Inc., 407 F.3d 1371, 1380 (Fed. Cir. 2005) (citations omitted). In this case, Etzel states that processes such as reverse osmosis usually result in about 80% purity in protein isolation. Etzel ¶ 8 (cited in Appeal Br. 18). Etzel also states that such “techniques also change the protein profile of the resulting isolate so that it no longer mimics that of the original milk product.” Etzel ¶ 8 (cited in Appeal Br. 18).

The claim language at issue, however, does not require any particular protein isolation purity or protein profile. The Examiner relies on Tossavainen as disclosing reverse osmosis but finds that Tossavainen does not disclose that reverse osmosis is performed at a temperature within the claimed range. *See* Final Act. 12 (explaining that because Tossavainen does not provide specific operating conditions of reverse osmosis, “[t]o the extent performing the reverse osmosis at room temperature would not simply be obvious in light of the lack of any particular preferred temperature, a skilled practitioner would be motivated to consult Etzel et al. to confirm an appropriate reverse osmosis temperature”). The Examiner merely cites Etzel to show that the recited temperature range for reverse osmosis was known in the art at the time of Appellant’s invention. Final Act. 12; Ans. 19. Appellant has not identified error in the Examiner’s fact finding, nor the Examiner’s rationale in support of the rejection. We sustain the rejection of claims 7 and 21 as a result.

Claims 3 & 19

Claim 3 depends from claim 1 and additionally recites “wherein the ultrafiltration (step a) is carried out at a temperature in the range from about 12 to about 20°C.” Claim 19 depends from claim 17 (which recites identical steps (a) to (d) as claim 1) and recites the same.

Appellant repeats the argument that both Tikanmaki and Tossavainen “relate to the production of lactose-free milk but has nothing to do with the production of colorless vat milk and the production of riboflavin as claimed herein.” Appeal Br. 20. As analyzed *supra*, this argument is unpersuasive to show that Tikanmaki or Tossavainen is non-analogous art.

Appellant’s remaining argument that a skilled artisan would not have combined Tikanmaki and Tossavainen because they use hydrolysis at different stages of the process is also unpersuasive. From the outset, the argument is unsupported by evidence. Such “[a]ttorneys’ argument is no substitute for evidence.” *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1581 (Fed. Cir. 1989). The argument is unpersuasive also because it is not within the scope of the open-ended claim which does not exclude hydrolysis. Finally, Appellant has failed to explain, in any detail, why the alleged timing of hydrolysis in Tikanmaki and Tossavainen would have discouraged one of ordinary skill from the combination proposed by the Examiner.

The rejection of claims 3 and 19 is sustained based on the foregoing.

Remaining Claims

With regard to claims 6, 10, 15, 20, and 23, Appellant argues no more than the additional references do not “cure the deficiencies” of those cited for claim 1. Appeal Br. 20–21. For the reasons discussed above, there are no deficiencies that require curing by the additional references. We accordingly sustain the rejections of claims 6, 10, 15, 20, and 23. *See* 37 C.F.R. § 41.37(c)(1)(vii).

CONCLUSION

The Examiner’s rejections are affirmed.

More specifically,

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2, 9, 11, 13, 14, 16–18, 22, 24	103	Tossavainen, Nagasawa, Moeller, and Carver	1, 2, 9, 11, 13, 14, 16–18, 22, 24	
3, 19	103	Tossavainen, Nagasawa, Moeller, Carver, Tikanmaki	3, 19	
6, 20	103	Tossavainen, Nagasawa, Moeller, Carver, Holst	6, 20	
7, 21	103	Tossavainen, Nagasawa, Moeller, Carver, Etzel	7, 21	
10, 23	103	Tossavainen, Nagasawa, Moeller, Carver, Koizumi	10, 23	
15	103	Tossavainen, Nagasawa, Moeller, Carver, Norris	15	
Overall Outcome:			1–3, 6, 7, 9–11, 13–24	

TIME PERIOD FOR RESPONSE

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

AFFIRMED