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EXAMINER

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Patent Trial and Appeal Board

INFORMATIVE

Standard Operating Procedure 2

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KAZUYA MAEDA, TSUYOSHI KUROSAWA,
TAKESHI ISHII, and KOICHIRO IKEMOTO

Appeal 2010-009814
Application 10/519,832
Technology Center 3700

Before STEFAN STAICOVICI, JAMES P. CALVE, and
MITCHELL G. WEATHERLY, *Administrative Patent Judges*.

WEATHERLY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a rejection of claims 6, 8, and 10. Claims 1-5, 7, 9, and 11-18 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

The claims are directed to a frozen dessert manufacturing apparatus. Claim 6, reproduced below, is representative of the claimed subject matter:

6. A frozen dessert manufacturing apparatus comprising:

a cold storage which cold-stores a liquid containing bag constituted of a bag main body containing a mixture and having flexibility and an outer layer member disposed outside this bag main body, capable of forming a sealed space between the outer layer member and the bag main body, and having flexibility;

a cooling cylinder which stirs and cools the mixture supplied from the liquid containing bag to thereby manufacture frozen dessert;

a cooling device which cools the cold storage or the cooling cylinder;

an air compression device;

a mixture supply passage for connecting the inside of the bag main body of the liquid containing bag to the inside of the cooling cylinder;

a bag pressurizing passage for supplying compressed air produced by the air compression device between the outer layer member and the bag main body of the liquid containing bag;

an air supply passage for supplying compressed air into the cooling cylinder; and

a combined passage member detachably attached to the cooling cylinder and disconnectably connected to the mixture supply passage and the air supply passage,

wherein the mixture supply passage is combined with the air supply passage, and thereafter connected to the inside of the cooling cylinder by the combined passage member, and the combined passage member is disposed in the cold storage.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Wilcox	US 6,234,351 B1	May 22, 2001
Meserole	US 6,494,055 B1	Dec. 17, 2002

REJECTION

The Examiner rejected claims 6, 8, and 10 under 35 U.S.C § 103(a) as being unpatentable over the combination of Meserole and Wilcox.

OPINION

The Claimed Subject Matter

All claims on appeal recite a frozen dessert manufacturing apparatus that includes, *inter alia*, a “cold storage” and a “combined passage member” that “is disposed in the cold storage.” Br., Claims Appx. 22–23. The claimed cold storage is a refrigerated portion of the enclosure in which a liquid dessert mix is stored at temperatures above freezing. Spec. 7–8. This dessert mix is combined with air in the claimed “combined passage member” before the air/liquid mixture passes into a cooling cylinder. *Id.* at 13–14. The cooling cylinder further lowers the temperature of the air/liquid mixture and freezes the dessert mixture to its final consistency. *Id.* at 26.

The Specification describes the claimed combined passage member as a “Y-type mixing unit 57” that combines dessert mix and air before entering a cooling cylinder to ensure the correct consistency of the dessert being dispensed from the claimed dessert maker. *Id.* at 13–14. The Specification explains that the combined passage member 57 is located inside cold storage 2 so that the “temperature of the mixture or the compressed air flowing into the cooling cylinder 8 does not rise.” *Id.* at 26; *see also Id.* at 14.

The Rejection on Appeal

The Examiner rejected claim 6, the sole independent claim, as being unpatentable in light of Meserole and Wilcox. Ans. 3. The Examiner finds that Meserole’s “air injection point 35,” which is shown outside the refrigerated mix cabinet, is akin to the claimed “combined passage member.” Ans. 3; *see also* Meserole, fig. 4 (illustrating air injection point 35 outside cold storage area). Appellants do not contest this finding. Recognizing that Meserole does not explicitly disclose an air injection point inside cold storage, the Examiner finds that:

The location of the combined passage member 35 of Meserole is considered to be a matter of obvious choice to one of ordinary skill in the art. No criticality or unexpected results are seen or have been disclosed for the location of the combined passage member being located in the cold storage.

Ans. 3.

The Appellants’ Argument

Appellants contend that the Examiner committed error by finding that the location of the “combined passage member” in “cold storage” is merely an obvious matter of design choice. Appellants argue no other error by the

Examiner regarding the scope and content of the prior art or the differences between the prior art and the claims. Specifically, Appellants argue:

Changing the location of the air injection point 35 to a new location inside the refrigerated mix cabinet 40 would modify the operation of the **Meserole '055** device. If the air injection point were located inside the refrigerated mix cabinet 40, the mix and the air would be at colder temperatures when they were combined, and thus the mix and the air would combine in a different manner.

Accordingly, in view of the above, the location of the air injection point 35 is not merely a matter of obvious design choice.

App. Br. 15. Appellants also contend that the Examiner failed to make a prima facie case of obviousness because the Examiner failed to cite evidence supporting the conclusion that moving the combined passage member to cold storage was an obvious design choice. *Id.* at 16.

The Examiner's Response

The Examiner responded by noting that Appellants failed to explain how the dessert mix and air would combine differently or how Meserole would operate any differently if the air injection point were inside rather than outside the cold storage area. Ans. 4. The Examiner also noted that the Appellants' Specification failed to explain why the location of the "combined passage member" inside the cold storage was critical. *Id.* The Examiner further noted that a skilled artisan would not expect, nor had Appellants identified, any unexpected result stemming from moving the "combined passage member" from outside to inside cold storage. *Id.* at 4–5. To the contrary, the Examiner concluded that moving the combined passage member to cold storage would merely achieve the result predicted by a

skilled artisan, namely keeping the mixture of air and dessert mix colder. Advisory Action, mailed July 6, 2009, at 2. Lastly, the Examiner found that any cooling effect that might occur by moving the Appellants' "combined passage member" from outside to inside the cold storage would be negligible because "the air supply line 51 ... is a relatively short one." Ans. 5.

Analysis

Per se rules for determining obviousness are disfavored. *In re Ochiai*, 71 F.3d 1565, 1571 (Fed. Cir. 1995). The Supreme Court set forth the requirements for analyzing obviousness of patent claims as follows:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. *See In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) ("[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 obviousness").

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007).

We agree with Appellants that the Examiner failed to provide reasoning based upon rational underpinning to explain why a skilled artisan would have moved the combined passage member of Meserole to cold storage. *See App. Br.* 15-16. We discourage examiners from relying on "design choice" because it is generally a mere conclusion, which is no substitute for obviousness reasoning based on factual evidence. Nonetheless, "design choice" may be appropriate where the applicant fails to

set forth any reasons why the differences between the claimed invention and the prior art would result in a different function or give unexpected results. *See In re Chu*, 66 F.3d 292, 298-99 (Fed. Cir. 1995). However, in this case, Appellants have explained how moving the combined passage member to cold storage as claimed would result in a different function than that shown by Meserole. Namely, combining the air and dessert mix inside the cold storage would prevent the entrained air from increasing the temperature of the mixture. *See* Br. 15; *see also* Spec. 26 (discussed *supra*). By contrast, because Meserole injects air directly from the compressor 25a into the cooled dessert mix at “air injection point 35,” we agree with Appellants that Meserole’s air injection increases the temperature of the mixture of dessert mix and air. *See* Br. 15. *See also*, Meserole, fig. 4. The Examiner has not set forth an explanation or technical reasoning why moving the combined passage member 35 of Meserole to cold storage would not result in a different function than that shown by Meserole, as Appellants suggest. We therefore find the Examiner’s proposed modification of Meserole is not an obvious design choice and reverse the Examiner’s rejection of claims 6, 8, and 10 under 35 U.S.C. § 103(a).

DECISION

For the reasons expressed above, we reverse the Examiner’s rejection of claims 6, 8, and 10.

REVERSED

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