

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* STEPHANE DUPIRE, JACQUES HERMIA,  
JEAN-YVES MACRON, JACQUES MEURENS  
and GEORGES RAHIER

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Appeal No. 2001-0965  
Application 08/751,035

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HEARD: AUGUST 13, 2002

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Before OWENS, WALTZ and POTEATE, *Administrative Patent Judges*.  
OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This appeal is from the final rejection of claims 18-24, 27 and 33-39, which are all of the claims remaining in the application.

*THE INVENTION*

The appellants claim a method for producing a boiled wort for use in making fermented malted beverages wherein malted cereals are ground to produce unseparated flour having a



cereals are ground to produce unseparated flour having a specified particle size. In claim 33 the particle size is such that about 60% to about 70% of the flour passes through a 60 mesh screen, and in claims 34 and 39 the particle size requirement is that from 30% to 40% of the flour has a particle size which prevents it from passing through a screen of 253  $\mu\text{m}$ . The independent claims all require steps of mashing, boiling and filtering, in that order.<sup>1</sup>

The Practical Brewer discloses a typical screen analysis for a mash filter operation wherein 45% of the particles are retained on a #60 screen (page 67).

Blum discloses a process for producing a boiled malt wort (col. 1, lines 9-10). Blum teaches (col. 2, lines 18-33):

The desirable advantages of the process of this invention can be achieved by using a malt flour and by placing the filtration step after the boiling operation instead of between the mashing and boiling cycle. This will also permit these operations to be carried out in a single reaction vessel.

In order to achieve filtration after boiling, the malt must be ground fine enough so that complete conversion takes place during the mashing cycle. Otherwise unexposed starch granules will be liberated during boiling, and will later interfere with fermentation and beer clarity. Malt flours ground fine enough to pass through a 60 mesh screen have been found

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<sup>1</sup> The appellants state in their specification that the conventional sequence is mashing-filtering-boiling (page 1, line 8 - page 2, line 3).

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satisfactory for this purpose, however, for optimum results a flour which will pass through a 100 mesh screen is preferred. Of course, more finely ground malt flour may also be used.

Hence, Blum discloses the appellants' sequence of mashing, boiling and filtering steps, and teaches that using this sequence requires a small ground malt flour particle size.

The examiner argues that although Blum appears to teach away from using the appellants' particle size, the reference would have motivated one of ordinary skill in the art to grind the grain in any form that prevents unexposed starch granules from being liberated in the boiling step (answer, pages 4-5). The appellants, however, do not state that their grinding prevents unexposed starch granules from being liberated in the boiling step. Instead, the appellants state (Dupire declaration filed June 15, 1998, paper no. 26, third page):

As anticipated by BLUM, such an intermediary screen analysis provides unexposed starch granules which are liberated during boiling and which are likely to interfere with fermentation.

Surprisingly and unexpectedly, it was found that said liberated starch is retained during filtering by the filtering bed constituted by the insolubles accumulated on the filtering cloth, at least in a proportion such that there will be no noticeable detrimental effect as far as fermentation and beer clarity are concerned.

Thus, the examiner's argument is not well taken.

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The examiner argues, in reliance upon *In re Gurley*, 27 F.3d 551, 31 USPQ2d 1130 (Fed. Cir. 1994), that "even though a reference may provide specific guidance to proceed in a direction contrary to the claimed invention, in view of the general guidance found within the four corners of the reference, those in the art will be motivated to explore other avenues other than those specifically cited" (answer, page 6).

*Gurley* does not support the examiner's argument. In *Gurley*, 27 F.2d at 553, 31 USPQ2d at 1132, the court stated:

Although a reference that teaches away is a significant factor to be considered in determining unobviousness, the nature of the teaching is highly relevant, and must be weighed in substance. A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use.

*Gurley*'s invention was a printed circuit material which included a substrate material made of a nonwoven web impregnated with epoxy and which was bendable and shape retaining. See *id.*, 27 F.3d at 552, 31 USPQ2d at 1131. The Yamaguchi reference disclosed a printed circuit material having a fibrous substrate impregnated with a polyester-imide resin instead of epoxy. See *id.* Yamaguchi taught that circuit boards having an epoxy-impregnated fibrous substrate have "relatively acceptable

dimensional stability" and "some degree of flexibility" but were inferior to circuit boards made with his polyester-imide resins. See *id.*, 27 F.3d at 552-53, 31 USPQ2d at 1131. The court noted that Yamaguchi taught that epoxy had been used for Gurley's purpose, that Gurley did not distinguish his epoxy product from that described by Yamaguchi, and that Gurley did not offer specific epoxies or improved properties. See *id.*, 27 F.3d at 553, 31 USPQ2d at 1132. The court stated that "Gurley asserted no discovery beyond what was known to the art". *Id.*

Unlike in *Gurley*, Blum does not indicate that feeding particles having the appellants' particle size to a mashing-boiling-filtering sequence was known in the art but is inferior to using particles having Blum's particle size. Instead, Blum indicates that particles smaller than those used by the appellants are to be used in Blum's mashing-boiling-filtering sequence (col. 2, lines 24-33).

The examiner argues that "[t]here is no requirement [in Blum] that a 60 mesh grind must be used. What is found is merely a teaching, for those of ordinary skill in the art, that the grist must [be] ground fine enough so as to limit the amount of starch and it is suggested that Blum found a grind of 60 mesh to be satisfactory. Blum leaves open for those in the art to

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optimize the grind so as to find a level of acceptable starch"  
(answer, pages 11-12).

Blum teaches that flour which passes through a 60 mesh screen has been found satisfactory, but that for optimum results a flour which passes through a 100 mesh screen (i.e., a flour having a smaller particle size) is preferred (col. 2, lines 29-32). Blum also teaches that a finely ground flour can be used (col. 2, lines 32-33). The examiner has not explained how this teaching of using flour having a particle size which is in the range of smaller to much smaller than the appellants' particle size would have led one of ordinary skill in the art to obtain the appellants' particle size by optimization.

The examiner argues that "it would have been obvious to those of ordinary skill in the art to perform the well known mashing and boiling steps in a single vessel and then filter the resulting wort as done by Blum, using the grist and filter of The Practical Brewer because the use of a single vessel for boiling and mashing 'produces maximum filtration efficiency by reducing the time required for filtration and by increasing the ability of the sparge water to remove soluble material form [sic, from] the spent grain' (col. 2, lines 5 to 10)" (answer, page 6). The excerpt from Blum relied upon by the examiner, however,

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pertains to Blum's process wherein the particles have Blum's particle size. The examiner has not provided evidence or technical reasoning which shows that one of ordinary skill in the art would have considered this teaching to apply to a process wherein the particles have the appellants' particle size.

For the above reasons we conclude that the examiner has not carried the burden of establishing a *prima facie* case of obviousness of the invention recited in any of the appellants' claims.

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*DECISION*

The rejection of claims 18-24, 27 and 33-39 under 35 U.S.C.  
§ 103 over The Practical Brewer in view of Blum is reversed.

*REVERSED*

TERRY J. OWENS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
THOMAS A. WALTZ	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
LINDA R. POTEATE	)	
Administrative Patent Judge	)	

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