

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN K. FORTIN

Appeal No. 1996-4071
Application No. 08/292,692

ON BRIEF

Before GARRIS, WALTZ, and KRATZ, *Administrative Patent Judges*.
KRATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claim 1, which is the only claim pending in this application.

BACKGROUND

Appellant's invention relates to a method of producing an open-ended container from a sheet of unoriented thermoplastic material. In appellant's formation process a biaxially

oriented intermediate is blow formed into a forming tube without plug assist, the intermediate is placed on a male molding form and heat shrunk onto the surface thereof, and the thus shaped container is subsequently removed from the male form. According to appellant, the claimed process allows for the formation of containers that may be used as food containers or laboratory beakers with thin, flat bottoms exhibiting good heat transfer capabilities (specification, page 8, line 16 through page 9, line 17). Claim 1 is reproduced below.

1. A method for producing a biaxially oriented, open-ended container comprising:

forming a biaxially oriented intermediate by blow forming, without plug assist, into a forming tube a sheet of unoriented thermoplastic material that is maintained at or near its orientation temperature, wherein the depth of draw of said intermediate is sufficient for full orientation of the sidewalls;

providing means for preventing said thermoplastic material from sticking to the sides of said forming tube during the blow forming;

placing said intermediate on a male form of a predetermined size, shape and texture;

heating said intermediate above the orientation temperature of said thermoplastic material to heat-shrink said intermediate onto the surface of said form to create said container; and

Appeal No. 1996-4071
Application No. 08/292,692

Page 3

removing said container from said form.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Great Britain Patent (GB '830) Fagence	991,830	May 12, 1965
Japanese Patent (JP '817) 1981 ¹ Takeuchi et al.	56-16817	Dec. 18,
Japanese Patent (JP '824) 1982 ² Yamada et al.	59-78824	May 07,

Claim 1 stands rejected under 35 U.S.C. § 103 as being unpatentable over JP '824 or JP '817 in view of GB '830.

OPINION

Having carefully considered all of the arguments and evidence advanced by appellant and the examiner, we find ourselves in agreement with appellant that the examiner has

¹ All subsequent reference in this opinion to JP '817 is a reference to the English language translation of the Japanese laid-open application of record.

² All subsequent reference in this opinion to JP '824 is a reference to the English language translation of the Japanese laid-open application of record.

failed to establish the obviousness of the claimed subject matter within the meaning of 35 U.S.C. § 103.

In fashioning the stated rejection, the examiner relies on JP '817 or JP '824 for allegedly disclosing the formation of a biaxially oriented intermediate using a plug, a forming method step precluded by the claimed process herein.

According to the examiner (answer, page 4), however:

[i]t would have been obvious to one of ordinary skill in the art ... to draw the blank of either Japanese reference using positive pressure without plug-assist when the end use did not require the uniform thickness resulting from using a plug or a thinner bottom was desirable.

In support of this proposed modification of the processes taught by JP '817 or JP '824, the examiner relies on the teachings of GB '830 in relation to pressure-forming being an alternative to a plug-assisted forming step.

We do not agree with the examiner's view of this matter. The difficulty we have with the examiner's position stems from the fact that GB '830 is directed to a molding process wherein the thermoplastic material is ultimately brought into intimate engagement with the mold via vacuum, pressure and/or plug assist techniques for final forming (GB '830, e.g., page 2,

lines 30-34 and page 4, line 126 to page 5, line 5). In our view, that process is somewhat remote from the instantly claimed process herein which requires that the formation of the container take place via a heat-shrink method using a male form subsequent to the formation of a biaxially oriented intermediate product that is obtained by blow forming a sheet of unoriented plastic material into a forming tube without plug assist. While JP '817 and possibly JP '824 may be directed to heat-shrink methods of forming containers, the examiner has not clearly carried the burden of explaining why a skilled artisan would have ignored their specific teachings requiring plug assist formation of an intermediate in such heat-shrink methods of container formation in any particular one of their disclosed embodiments and substantially modified their process including the molding apparatus used therein based on the distinctly differing overall method taught by GB '830.

More fundamentally, we cannot agree with the examiner's position regarding the claimed limitation requiring that the blow forming step take place in an environment wherein "means for preventing said thermoplastic material from sticking to

the sides of said forming tube" were provided. Having recognized that none of the applied references teach or suggest this claimed limitation, the examiner (answer, page 5), nonetheless, takes the position that:

[i]t is well known to coat molds with mold release agent or Teflon in order to prevent sticking of the material. These agents are equivalents for the function of preventing sticking. It would have been obvious ... to apply mold release agent or Teflon to the entire surface of the mold in order to prevent sticking and facilitate removal of the end product from the mold.

Here, even if we accepted the examiner's suggested officially noticed fact of the prior use of mold release agents, the examiner has not met the burden of explaining why a skilled artisan would have been motivated to use a release agent coating on any of the particular molds of JP '817 or JP '824 during a modified process wherein blow molding takes place without plug assist. In this regard, we note that appellant (brief, page 7) challenges the examiner's assertion of the obviousness of the claimed limitation at issue noting that "no indication that sticking of the intermediate to the forming tube is a problem" is apparent from the applied prior

art and that "... the cited art simply provides no motivation to add this feature...." We agree. Under the present circumstances and in the absence of the examiner citing particular prior art reference(s) teaching this officially noticed fact in particularized molding embodiments and processes, we can not agree that the examiner has met the burden of establishing that a skilled artisan would have been imbued with both a suggestion and reasonable expectation of success in using such a coating in a molding step of JP '817 or JP '824 that has additionally been modified to correspond to the intermediate molding step claimed herein. Moreover, absent a particularized embodiment displaying the officially noticed coating being cited, we can not reasonably determine that the coating that is urged to be well known by the examiner would necessarily correspond to appellant's claimed "means..." as urged by appellant (brief, pages 7 and 8).

On this record and in light of the above discussion, we determine that the examiner has failed to present sufficient evidence of a suggestion, teaching or motivation to combine the references as proposed so as to arrive at the claimed invention with a reasonable expectation of success. *See In re*

Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999); *In re Rouffet*, 149 F.3d 1350, 1356, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). Whether the evidence of a teaching or suggestion to combine comes from the references themselves, the knowledge of one of ordinary skill in the art, or from the nature of the problem to be solved, the showing of evidence must be clear and particular. *Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. Moreover, the determination of obviousness must be based on facts, and not on unsupported generalities. See *In re Freed*, 425 F.2d 785, 787, 165 USPQ 570, 571 (CCPA 1970).

CONCLUSION

The decision of the examiner to reject claim 1 under 35
U.S.C. § 103 is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
THOMAS A. WALTZ)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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)	
PETER F. KRATZ)	
Administrative Patent Judge)	

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Appeal No. 1996-4071
Application No. 08/292,692

Page 11

BARRY J. SWANSON
SWANSON & BRATSCHUN
8400 E PRENTICE AVENUE SUITE 200
DENVER, CO 80111