

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte DARIUS J. PREISLER and
LARRY J. WINGET

Appeal No. 2005-2633
Application No. 10/254,376

ON BRIEF

Before OWENS, TIMM and JEFFREY T. SMITH, Administrative Patent Judges.
JEFFREY T. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 17 to 19, 21 to 23 and 25 to 27. We have jurisdiction under 35 U.S.C. § 134.

The Examiner cited the following references in rejecting the appealed claims:

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| Berger et al. (Berger) | 4,263,247 | Apr. 21, 1981 |
| Klobucar et al. (Klobucar) | 5,162,092 | Nov. 10, 1992 |
| Daniel et al. (Daniel) | 5,833,304 | Nov. 10, 1998 |
| Keller et al. (Keller) | 6,063,315 | May 16, 2000 |
| Wandyez | 6,409,947 | Jun. 25, 2002 |
| Barber et al. (Barber) (filed March 25, 1999) | 6,451,232 | Sep. 17, 2002 |

The Examiner entered the following rejections (Answer, pp. 3-10):

Claims 17, 18, 21, 22 stand rejected under 35 U.S.C. ' 103(a) as obvious over Barber in view of Daniel.

Claims 19 and 23 stand rejected under 35 U.S.C. ' 103(a) as obvious over Keller in view of Klobucar and in further view of Wandyez.

Claims 25-27 stand rejected under 35 U.S.C. ' 103(a) as being unpatentable over Berger in view of Barber.

The Examiner also entered a new ground of rejection of claims 17 and 25 under 35 U.S.C. ' 102(e) as anticipated by Barber.

Rather than reiterate the conflicting viewpoints advanced by the Examiner and the Appellants regarding the above-noted rejections, we make reference to the Answer (mailed March 23, 2005) for the Examiner's reasoning in support of the rejections, and to the Briefs (filed February 25, 2005 and June 9, 2005) for the Appellants' arguments there against. We reverse the ' 102 and 103 rejections. Our reasons follow.

OPINION

Appellants' invention generally relates to an injection molding method for making a lightweight, thermoplastic, vehicle headliner having at least one integrally formed, energy-absorbing, head-impact mechanism. (Brief, p. 3). Appellant further discloses that vehicle headliners must meet head impact requirements such as HIC (Head Injury Criteria) requirements. (Brief, p. 2). Claims 17 and 25, as presented in the Brief, are reproduced below:

17. An injection molding method for making a lightweight, thermoplastic, vehicle headliner having at least one integrally-formed, energy-absorbing, head-impact mechanism, the method comprising:

 providing an injection mold having first and second mold halves;
 closing the mold so that the first and second mold halves define a mold cavity;

 injecting molten, thermoplastic resin into the mold cavity to form a headliner including a stiff, self-supporting, thermoplastic sheet and a plurality of spaced energy-absorbing, head-impact mechanisms formed on the sheet and wherein each of the head-impact mechanisms includes a plurality of spaced-apart, energy-absorbing thermoplastic structures which are integrally molded and extend upwardly from an upper surface of the sheet and wherein the number, spacing and size of the structures are predetermined based on head-impact requirements;

 cooling the headliner beneath the softening point of the molten resin; and
 opening the mold and removing the headliner.

25. An injection molding method for making a lightweight, thermoplastic vehicle headliner, the method comprising:

 providing an injection mold having first and second mold halves;
 closing the mold so that the first and second mold halves define a mold cavity;

 injecting molten, thermoplastic resin into the mold cavity to form a headliner including a stiff, self-supporting, thermoplastic sheet adapted to be mounted adjacent the roof so as to underlie the roof and completely shield the roof from view, the sheet having an upper surface and a lower surface;

and a plurality of spaced energy-absorbing, head-impact mechanisms formed on the sheet for absorbing energy of an impact with the headliner by a passenger of the vehicle wherein each of the head-impact mechanisms include a plurality of spaced-apart, energy-absorbing, thermoplastic structures which are integrally molded to and extend upwardly from the upper surface of the thermoplastic sheet and wherein the number, spacing, and size of the structures are predetermined based on head-impact requirements;

cooling the headliner beneath the softening point of the molten resin; and opening the mold and removing the headliner.

The '102 rejection

The Examiner rejected claims 17 and 25 under 35 U.S.C. '102(e) as anticipated by Barber. We reverse.

In order for a claimed invention to be anticipated under 35 U.S.C. § 102, all of the elements of the claim must be found in one reference. *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). Claims 17 and 25 both require a plurality of spaced energy-absorbing, head-impact mechanisms. Each of the head-impact mechanisms includes a plurality of spaced-apart, energy-absorbing thermoplastic structures which are integrally molded and extend upwardly from an upper surface of the molded sheet. The Examiner relies on Barber's impact pads (13, 14 and 15) as the plurality of head-impact mechanisms. However, these impact pads do not each have a plurality of spaced-apart, energy-absorbing thermoplastic structures which are integrally molded and extend upwardly from an upper surface of the molded sheet. The Examiner also acknowledges that Barber does not teach the use of thermoplastic materials in the molding process

structures required by the claimed invention. (See discussion of §103 rejection Answer, p. 4). As such, the Barber reference does not discloses the same invention as described by the present claims within the meaning of 35 U.S.C. § 102. Accordingly, we determine that the Examiner has not established a *prima facie* case of anticipation with respect to the subject matter of claims 17 and 25.

The '103 rejections

In making a determination that an invention is obvious, the Examiner has the initial burden of establishing a *prima facie* case. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S. P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, several basic criteria must be met. There must be some suggestion or motivation, either in the reference or references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). In addition, all of the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q., 580 (CCPA 1974).

Claims 17, 18, 21, 22 stand rejected under 35 U.S.C. '103(a) as obvious over Barber in view of Daniel.¹ We reverse.

¹ We will limit our discussion to claim 17. Claims 18, 21 and 22 depend on claim 17.

The Examiner relied on the Daniel reference for teaching that it was conventional to use thermoplastic resins in molding processes. As we indicated above, Barber's impact pads do not each have a plurality of spaced-apart, energy-absorbing thermoplastic structures that are integrally molded and extend upwardly from an upper surface of the molded sheet as required by claim 17. As such, the combination of Barber and Daniel does not render obvious the subject matter of claim 17 within the meaning of '103.

Claims 19 and 23 stand rejected under 35 U.S.C. '103(a) as obvious over Keller in view of Klobucar and in further view of Wandyez.² We reverse.

The Examiner has failed to establish a *prima facie* case of obviousness to support the rejections for two reasons. First, the cited reference fails to teach or suggest every element of the claimed invention. Second, the Examiner has not identified a teaching or suggestion within the cited reference or within the general knowledge of those skilled in the art that would have led one skilled to the claimed invention.

According to the Examiner, Keller teaches molding large articles such as an automobile body part by gas-assisted injection molding process. However, Keller does

² We will limit our discussion to claim 19. Claim 23 depends on claim 19.

not teach the molding of a headliner with energy absorbing structures. (Answer, pp. 5-6). The Examiner asserts that Klobucar and Wandyez teach that headliners for a vehicle roof can be formed by gas-assisted injection molding. The formed headliner may include hollow rib sections for structural integrity. (Id.) The Examiner recognizes combination does not set forth using the voids or hollow sections as head impact mechanisms as currently claimed. However, the Examiner asserts that the head impact mechanisms are a recitation of the intended use of the produced part.

The portions of the Keller reference identified by the Examiner for describing the features of the claimed invention are incorrect. While the reference discloses the production of molded parts having hollow rib voids, the reference does not disclose that the ribs could function as a compressible head impact mechanism. To the contrary, Keller discloses the ribs are present to provide structural support. (Col. 5, ll. 51-56). If these components were compressible as suggested by the Examiner the stated intended purpose for structural integrity would be defeated. The remaining references cited in the rejection do not describe head impact mechanisms. Accordingly, we agree with Appellants, Brief pages 7-9, that the Examiner has failed to establish a *prima facie* case of obviousness of the claimed subject matter.

Claims 25-27 stand rejected under 35 U.S.C. '103(a) as obvious over Berger in view of Barber.³ We reverse.

The Examiner asserts that Berger teaches an injection molding process but fails to teach molding permanently deformable ribs, or energy absorbing head impact mechanisms. The Examiner relies on Barber for teaching the differences between the claimed invention and Berger. (Answer, pp.7-9).

As we indicated above, Barber's impact pads do not each have a plurality of spaced-apart, energy-absorbing thermoplastic structures that are integrally molded and extend upwardly from an upper surface of the molded sheet as required by claim 25. As such, the combination of Barber and Berger does not render obvious the subject matter of claim 25 within the meaning of '103.

³ We will limit our discussion to claim 25. Claims 26 and 27 depend on claim 25.

CONCLUSION

All of the stated rejections of the pending claims under ' ' 102 and 103 are reversed.

REVERSED

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| CATHERINE TIMM Administrative Patent Judge |) BOARD OF PATENT |
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