

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 ROGER TORNERO

Appeal No. 2007-1486
Application No. 10/339,003¹
Technology Center 1700

Decided: June 19, 2007

Before: RICHARD E. SCHAFER, CAROL A. SPIEGEL and
MICHAEL P. TIERNEY, *Administrative Patent Judges*.

SPIEGEL, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an ex parte appeal under 35 U.S.C. § 134(a) (2002) from finally rejected claims 1-10. Claims 11-22, the only other pending claims in the application on appeal, have been withdrawn from consideration as being

¹ The application on appeal was filed on 9 January 2003. The real party-in-interest is said to be L & P Property Management.

drawn to a non-elected invention. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

I. Statement of the case

The invention on appeal is directed to a seating composite for covering the seat and back portions of a seat frame, e.g., a chair frame (Specification, 1). The seating composite comprises a film layer, e.g., of urethane, vinyl or a urethane/vinyl blend, and an elastomeric net material, e.g., a polyester elastic material, coupled with the film layer (*id.*, 2 and 5). The film layer may be cast directly onto the elastomeric net material or a film layer/adhesive layer/elastomeric net material layer laminate may be formed (*id.*, 3).

Claim 1 is illustrative and reads as follows:

1. A seating composition comprising:
 - a film layer; and
 - an elastomeric net material coupled with the film layer.

The Examiner rejected claims 1-10 under 35 U.S.C. § 103(a).

The following prior art² was relied upon by the Examiner:

Smith	US 4,400,422	Aug. 23, 1983
Bafford	US 4,746,565	May 24, 1988
Isoda	US 5,639,543	Jun. 17, 1997

Smith, Bafford and Isoda qualify as prior art under 35 U.S.C. § 102(b).

² The reader should know that no references to et al. are made in this opinion.

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In deciding this appeal, we have considered only the following: (a) the 10/339,003 specification, (b) the final rejection mailed 11 January 2006, (c) the Appeal Brief ("Appeal Br.") filed 12 June 2006, (d) the Examiner's Answer ("Answer") mailed 28 August 2006, (e) the Reply Brief ("Reply Br.") filed 27 October 2006, (f) Smith, (g) Bafford, (h) Isoda and (i) claims 1-10 on appeal.

The rejections under review in this appeal are:

Claims 1, 2 and 4-10 stand rejected under 35 U.S.C. § 103(a) as obvious over Bafford in view of Isoda. Claim 3 stands rejected under 35 U.S.C. § 103(a) as obvious over Bafford in view of Isoda, as applied to claim 1, and further in view of Smith.

We affirm.

II. Obviousness

A claimed invention is not patentable if the subject matter of the claimed invention would have been obvious to a person having ordinary skill in the art. 35 U.S.C. § 103(a); *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966).

Facts relevant to a determination of obviousness include (1) the scope and content of the prior art, (2) any differences between the claimed invention and the prior art, (3) the level of skill in the art and (4) relevant objective evidence of obviousness or non-obviousness. *KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1389; *Graham*, 383 U.S. at 17-18.

A person having ordinary skill in the art uses known elements and process steps for their intended purpose. *Anderson's-Black Rock, Inc. v.*

Pavement Storage Co., 396 U.S. 57 (1969) (radiant-heat burner used for its intended purpose in combination with a spreader and a tamper and screed); *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282 (1976) (the involved patent simply arranges old elements with each performing the same function it had been known to perform); *Dunbar v. Meyers*, 4 Otto (94 U.S.) 187, 195 (1876) (ordinary mechanics know how to use bolts, rivets and screws and it is obvious that any one knowing how to use such devices would know how to arrange a deflecting plate at one side of a circular saw which had such a device properly arranged on the other side).

As a preliminary matter we note that Appellant has grouped dependent claims 2-10 with independent claim 1 (Appeal Br., 12). Appellant has not separately argued the patentability of claims 2-10 and, therefore, the patentability of claims 2-10 stand or fall with the patentability of claim 1. Thus, we decide this appeal on the basis of claim 1. 37 CFR § 41.37(c)(1)(v).

A. Obviousness rejection based on Bafford and Isoda

1. the prior art
 - a. Bafford

In its "Background of the Invention" section, Bafford describes upholstery fabrics used in vehicle seats, kitchen furniture, and public seating in restaurants, theaters, etc. (col. 1, l. 3 - col. 2, l. 2). These fabrics usually consist of a cotton, polyester or polyester/cotton scrim³ which is bonded to a layer of vinyl or urethane (col. 1, ll. 53-55). The scrim fabric can be woven,

³ A scrim is a durable, plain-woven, usually cotton fabric for use in clothing, curtains, building, and industry. *Merriam-Webster's COLLEGIATE DICTIONARY*, tenth edition, p. 1050.

knit or non-woven and is usually a lightweight open fabric designed to provide dimensional stability, tensile strength and tear resistance to the composite fabric (col. 1, ll. 55-58). The vinyl or polyurethane layer can be extrusion coated onto the scrim or can be cast as a separate film and then bonded to the scrim by stitch bonding, adhesive bonding or heat bonding (col. 1, ll. 58-63).

Bafford does not state whether its scrim fabric is an elastomeric material.

b. Isoda

Isoda describes a net⁴ structure made from a thermoplastic elastomer said to have markedly superior durability and cushioning properties necessary for furniture, beds, vehicle seats, etc., which has never been achieved by conventional net structures (col. 1, ll. 6-10; col. 2, ll. 61-67). The net structure may be a laminate or a composite of various net structures made of loops having different sizes, different deniers, different compositions, different densities, etc. so as to provide the desired property (col. 3, ll. 47-51). Increasing the amount of a fiber made from a thermoplastic elastomer in the net structure is said to particularly improve heat-resistance durability (col. 3, ll. 62-64). Examples of preferred thermoplastic elastomers include polyester elastomer (col. 4, ll. 3-4).

⁴ A net is an open-meshed fabric twisted, knotted or woven together at regular intervals. *Merriam-Webster's COLLEGIATE DICTIONARY*, tenth edition, p. 780.

2. the Examiner's position

The Examiner contends that it would have been obvious to a skilled artisan to have used Isoda's elastomeric net material as the scrim material of Bafford to create a seat having superior heat resistance, durability and cushioning properties (Answer, 4).

3. the Appellant's position

Appellant argues that the Examiner has summarily concluded that it would have been obvious to combine Bafford and Isoda without providing a factual basis to support the obviousness conclusion (Appeal Br., 4, 7-10; Reply Br., 2-8). Appellant maintains that the Examiner is required to point out an objective teaching in the prior art, either from the references themselves or from the knowledge of one of ordinary skill in the art, to suggest bonding Isoda's elastomeric cushioning net material, instead of a non-elastomeric fabric as described in Bafford, to a vinyl film layer to obtain an upholstery fabric other than that it would make a better fabric (Appeal Br., 8-9; Reply Br., 4). Appellant further argues that, in order to combine Isoda with Bafford, "the vinyl material disclosed in Bafford would have to be able to be extrusion coated onto the elastomeric three-dimensional random loop structure material of Isoda to create a seating composite" (Appeal Br., 11). Finally, Appellant argues that combining Isoda with Bafford would destroy the teaching in Bafford to use non-elastomeric materials to provide dimensional stability to the fabric because elastomeric and non-elastomeric materials do not provide the same dimensional stability (Appeal Br., 11).

4. analysis

The issue is whether Appellant has shown that the Examiner erred in rejecting claims 1-10 under 35 U.S.C. § 103(a). Specifically, in this case, has the Appellant shown that the Examiner failed to perform sufficient fact finding to support a conclusion of obviousness.

The Examiner pointedly identified relevant teachings in Bafford and Isoda relied upon to support a conclusion of obviousness (Answer, 3-4 and 6). Specifically, the "Background" section in Bafford establishes the composition of a typical upholstery fabric used for seating, i.e., a cotton and/or polyester scrim which is bonded to a layer of vinyl or urethane (col. 1, ll. 53-55). The scrim fabric, such as a polyester or polyester/cotton blend, is usually a lightweight open fabric designed to provide dimensional stability, tensile strength and tear resistance to the composite fabric (Bafford, col. 1, ll. 58-63). Isoda's statement that a thermoplastic elastomeric net material, preferably a thermoplastic polyester, provides superior durability, cushioning and heat-resistance durability properties necessary for furniture, beds, vehicle seats, etc., said never to been achieved by conventional net structures (col. 1, ll. 6-10; col. 2, ll. 61-67; col. 3, ll. 62-64; col. 4, ll. 3-4) represents a factual basis for using an elastomeric net material as at least part of a scrim fabric in a conventional upholstery fabric. Thus, we agree with the Examiner that one of ordinary skill in the art, reading Bafford and Isoda would have been motivated to use Isoda's thermoplastic elastomeric net material as a scrim in a conventional upholstery composite fabric as described by Bafford because Isoda expressly describes the elastomeric net material as having superior durability, cushioning and heat-resistance

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durability. In other words, we find that the Examiner has established a legally sufficient basis for combining the teachings of the prior art.

Furthermore, Appellant has not shown that the Examiner was incorrect in finding that one of ordinary skill in the art would not have been able to follow the teachings of the prior art and employ elastomeric polyester, which is known for use in fabrics, in polyester upholstery fabrics (Answer, 7). First, Appellant's characterization of Bafford is unduly limited. For example, Bafford discloses that the vinyl layer can be extrusion coated onto the scrim *or* can be cast as a separate film and then bonded to the scrim by stitch bonding, adhesive bonding or heat bonding (col. 1, ll. 58-63). Appellant has not explained why one skilled in the art would have been unable to use a known technique for forming a fabric composite, e.g., casting a vinyl layer as a separate film then bonding it to a scrim material by adhesive bonding, as described by Bafford, to arrive at the claimed invention. Additionally, Bafford does not expressly state whether elastomeric or non-elastomeric materials are used to provide dimensional stability in an upholstery fabric composite. Thus, the question here is not whether elastomeric and non-elastomeric polyester materials provide identical dimensional stability in an upholstery fabric composite, but rather what the combined teachings of the references would have suggested to those of ordinary skill in the art. Both Bafford and Isoda broadly disclose use of polyester-based materials in making such composites (Bafford at col. 1, ll. 58-63; Isoda at col. 4, ll. 3-4) and the elastomeric material of Isoda is said to provide markedly superior durability and cushioning properties (Isoda at col. 1, ll. 6-10; col. 2, ll. 61-67).

Therefore, we conclude that it would have been obvious to one of ordinary skill in the art to use Isoda's thermoplastic elastomeric net material as a scrim in a conventional upholstery composite fabric as described by Bafford because Isoda expressly describes the elastomeric net material as providing superior durability, cushioning and heat-resistance durability. *KSR*, 125 S.Ct. at 1739, 82 USPQ2d at 1395, ("The combination of familiar elements according to known methods is likely to be obvious when it does nothing more than yield predictable results."); *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) ("It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose.").

Appellant does not allege any unexpected benefit or performance arising from the claimed composition.

Based on the foregoing, we will sustain the rejection of claims 1, 2 and 4-10 under § 103(a) as obvious over Bafford in view of Isoda; and, of claim 3 under § 103(a) as obvious over Bafford in view of Isoda, as applied to claim 1, and further in view of Smith.

III. Conclusion

In summary, the decision of the Examiner (i) to reject claims 1, 2 and 4-10 under 35 U.S.C. § 103(a) as unpatentable over Bafford in view of Isoda is affirmed; and, (ii) to reject claim 3 under 35 U.S.C. § 103(a) as unpatentable over Bafford in view of Isoda, as applied to claim 1, and further in view of Smith is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

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