

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 47

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES  
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Ex parte SHOHEI MASUI, MASAHITO MATSUMOTO, NOBUHIRO USUI,  
TOSHIHIRO HOSOKAWA and RYUICHI ISHITSUBO

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Appeal No. 1996-2638  
Application No. 08/173,930<sup>1</sup>  
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ON BRIEF  
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Before CARROFF, PAK, and SPIEGEL, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's refusal to allow claims 1 and 8 through 15 which are all of

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<sup>1</sup> Application for patent filed December 28, 1993. According to appellants, the application in is a continuation of Application No. 07/866,307, filed April 13, 1992; which is a continuation of Application No. 07/455,009, filed December 22, 1989, now abandoned.

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the claims remaining in the application. Claim 1 was amended subsequent to the final Office action dated March 22, 1995, Paper No. 34.

Appellants have grouped the claims on appeal as follows (Brief, page 4):

Group I - Claims 1, 9 and 11 through 15;

Group II - Claim 8; and

Group III - Claim 10.

Appellants have also provided separate arguments for the patentability of the subject matter recited in claims 1, 8 and 10. See Brief, pages 6-12. Accordingly, for purposes of this appeal, we will limit our discussion to claims 1, 8 and 10 in accordance with 37 CFR § 1.192 (c)(5)(1993). Claims 1, 8 and 10 read as follows:

1. A molding process for producing a multilayer molded article comprising a thermoplastic resin body so that an edge part of the skin material present on the surface of the thermoplastic resin body is placed in a groove formed on the surface of the thermoplastic resin body, which process comprises the steps of:

providing an unclosed mold which includes a lower mold having at least one pin retained on a protrusion on an inner surface of the lower mold for fixing the edge part of the skin material at a position where the edge part of the skin material is placed, and further includes an upper mold having a kick for forming the groove,

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placing the skin material on the lower mold and fixing the edge part of the skin material with at least one pin on the inner surface of the lower mold,

supplying a mass of resin melt between the skin material and the lower mold, and

closing the upper and lower molds so that said edge part of the skin material which is fixed by the at least one pin is placed in said groove formed on the surface of the thermoplastic resin body to thereby form the multilayer molded article having one part covered by the skin material and another part free of coverage by the skin material.

8. The process according to claim 1, wherein the protrusion is formed in a groove which is formed in the lower mold.

10. The process according to claim 8, wherein the protrusion is movable in a direction in which the upper and lower molds are closed.

As evidence of obviousness, the examiner relies on the following prior art<sup>2</sup>:

Masui et al. (Masui '179)      5,053,179      Oct. 1, 1991  
(filed Nov. 29, 1988)

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<sup>2</sup> Appellants have not challenged the prior art status of the references relied upon by the examiner. Note also that appellants are not entitled to the benefit of the filing date of a foreign priority application under 35 U.S.C. § 119 and 37 CFR

§ 1.55 (a) (1993). Appellants have not perfected their claim of a foreign priority under 35 U.S.C. § 119 by failing to file a sworn or certified English translation corresponding to the foreign priority application, i.e., Japanese Patent Application 334089/1988. See 37 CFR § 1.55 (a) (1993).

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Masui et al. (Masui '198) 0 333 198 Sep. 20, 1989  
(Published European Patent Application)

Masui et al. (Masui '860) 2 214 860 A Sep. 13, 1989  
(Published UK Patent Application)

Claims 1 and 8 through 15 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of either Masui '860 or '179, and Masui '198.

We affirm.

Under 35 U.S.C. § 103, the obviousness of an invention cannot be established by combining the teachings of the prior art references absent some teaching, suggestion or incentive supporting the combination. **See ACS Hospital Systems, Inc. v. Montefiore Hospital**, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). This does not mean that the cited prior art references must specifically suggest making the combination. **See B.F. Goodrich Co. V. Aircraft Braking Systems Corp.**, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996); **In re Nilssen**, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988). Rather, the test for obviousness is what the combined teachings of the prior art references as a whole would have suggested to those of ordinary skill in the art. **In re Young**,

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927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); **In re Keller**, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

Here, Masui '860 and '179, like appellants, disclose a method of manufacturing multi-layer molded products comprising a thermoplastic resin and a skin material covering a predetermined portion of the thermoplastic resin, which are useful for a door trim or a rear trim of an automobile and the like. Compare Masui '860, abstract and page 1, and Masui '179, column 1, lines 8-17, with specification, page 1 and claim 1. Appellants acknowledge that the multi-layer molded products described in Masui '860 and '179 have an edge of the skin material placed within a groove on the surface of the thermoplastic resin. See Brief, page 10. The method involves providing an upper mold (7) defining an interior surface having a protrusion (11) (corresponding to the claimed kick) and a lower mold defining an interior surface having a groove where a bar (17) attached to a hydraulic cylinder (14) (corresponding to the claimed protrusion within the groove) is located. See Masui '860, the drawing in the abstract, and Masui '179, Figures 12 through 14 together with column 4. The

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bar (17) and the protrusion (11) are used to hold one of the edges of a surface material (3), i.e., a skin material, at a position within the interior surfaces of the upper and lower molds to prevent the displacement of the skin material on the thermoplastic resin. See Masui '860, the abstract, and Masui '179, Figure 13 and column 4, lines 50-55. The protrusion (11) is also used to form a groove on the surface of the resin. See the drawings of Masui '860 and '179. The hydraulic cylinder (14) allows the bar (17) to be movable in a direction in which the upper and lower molds are closed. See Masui '860, the abstract, and Masui '179, column 4. After fixing the skin material (3), a resin melt (4) is supplied between the skin material and the interior surface of the lower mold. See Masui '860, the abstract, and Masui '179, column 4, lines 55-60. The upper and lower molds are closed to produce a multi-layer molded product, which according to appellants as indicated *supra*, has an edge of the skin material placed within a groove on the surface of the thermoplastic resin. See Masui '860, the abstract, the drawing in the front page and page 13, and Masui '179, column 4, lines 50-68 and column 6, lines 1-20. As is also apparent

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from the drawings of Masui '860 and '179, the skin material (3) covers only a portion of the thermoplastic resin. The skin material (3) used may be selected from the group consisting of fabrics, non-woven fabrics, metals, metal foil, paper and films of thermoplastic resins. See Masui '860, page 11, and Masui '179, column 5, lines 15-20. The skin material (3) may be preheated or laminated, e.g., bonding at least two materials with an adhesive. See Masui '860, page 11, and Masui '179, column 5, lines 22-26. The resin melt (4) employed may contain inorganic fillers, glass fibers, pigments, lubricants and antistatic agents and is selected from the thermoplastic resins recited in claim 14. See Masui '860, page 11, and Masui '179, column 5, lines 27-38.

Although appellants argue that neither Masui '860 nor '179 teaches or would have suggested using pins, in lieu of bars (17), we find that Masui '860 describes using pins, in lieu of bars, to hold at least one of the edges of the skin material (3) during its molding process. See the abstract. Moreover, appellants have not challenged the examiner's finding that "such pins are well known in the art for fixing preforms in mold..." Compare Answer, page 3, with Brief in

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its entirety. As also indicated by the examiner (Answer, page 3), Masui '198 teaches that pins, like bars, can be used to fix or hold a skin material in place during the formation of a multi-layer molded product.

Given these teachings, we conclude that the use of pins, in lieu of bars, in the process of Masui '860 or '179, would have been at least suggested to one of ordinary skill in the art. One of ordinary skill in the art would have had a reasonable expectation that pins, like bars, would have prevented the displacement of a skin material during the formation of a multi-layer molded product. As is apparent from the examiner's finding at pages 3 and 4 of the Answer, the applied prior art, as a whole, establishes that pins and bars are art-recognized alternatives for holding or fixing a skin material in a particular area during molding processes. Note also that the structures of pins and bars are such that their respective advantages and disadvantages would have been readily apparent to one of ordinary skill in the art in fixing or attaching an edge of the skin material in the particular location within a mold taught by Masui '860 or '179 during the

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formation of a multi-layer molded product. **See In re Heinrich**, 268 F.2d 753, 756, 122 USPQ 388, 390 (CCPA 1959).

In view of the foregoing, we agree with the examiner that on this record, the evidence of obviousness outweighs the evidence of unobviousness proffered by appellants. Hence, we affirm the examiner's decision rejecting claims 1 and 8 through 15 under 35 U.S.C. § 103.

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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MARC L. CAROFF	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
CHUNG K. PAK	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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CAROL A. SPIEGEL	)	
Administrative Patent Judge	)	

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DECISION: AFFIRMED  
Send Reference(s): Yes No  
or Translation (s)  
Panel Change: Yes No  
Index Sheet-2901 Rejection(s):

Prepared: March 22, 2002

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3 MEM. CONF.    Y    N  
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PALM /ACTS 2/BOOK  
DISK(FOIA)/REPORT