

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HELMUT PATZELT, WOLFGANG RUSS,
KARL PEITSMEIER and WOLFGANG KERNER

Appeal No. 95-4379
Application 08/116,753¹

HEARD: DECEMBER 10, 1998

Before CALVERT, COHEN and STAAB, *Administrative Patent Judges*.
STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 2-5, all the claims pending in the application.

¹ Application for patent filed September 7, 1993.

Appeal No. 95-4379
Application 08/116,753

Appellants' invention pertains to an air bag for a vehicle occupant restraint system. Independent claim 2, a copy of which is appended to appellants' brief, is illustrative of the appealed subject matter.²

The references of record relied upon by the examiner in support of a rejection under 35 U.S.C. § 103 are:

Takada	4,966,389	Oct. 30, 1990
Kami et al. (Kami)	5,114,180	May 19, 1992
Matsumoto et al. (Matsumoto)	5,215,795	Jun. 1,

1993

Claims 2-5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Matsumoto in view of Takada and further in view of Kami.

Like appellants' invention, Matsumoto, the examiner's

² We observe that the warp and weft orientation limitation called for in the last paragraph of claim 2 is not illustrated in appellants' drawings, as required by 37 CFR § 1.83(a). We further observe that appellants' Figure 2 attempts to illustrate two alternative embodiments of the claimed invention (namely, the "crescent-shaped section" embodiment of claim 3 and the "kidney-shaped section" embodiment of claim 4) in apparent violation of 37 CFR § 1.84(h)(5). Upon return of the application to the examiner, correction of these drawing informalities would be appropriate.

Appeal No. 95-4379
Application 08/116,753

primary reference, discloses in Figure 9 an air bag having an air bag wall 83 of a fabric (A) which is substantially nonpermeable to gas, and a gas permeable section 84 of a fabric (C) radially spaced from the central section of the air bag for the controlled venting of hot gases as the air bag deploys. Among the claim limitations acknowledged by the examiner as being absent in Matsumoto is the requirement of claim 2 that the gas permeable fabric "is oriented in warp and weft at an angle of about 45E to the warp and weft of the fabric forming the wall of the air bag." As explained on page 2 of the specification, this feature helps to ensure that seams joining the fabric of the gas permeable section to the remaining air bag cover are loaded evenly.

In rejecting the appealed claims, the examiner relies on Takada for a teaching of the above noted warp and weft orientation feature. According to the examiner, Takada teaches providing the warp and weft of fabric sheets 7 and 8 oriented at 45 degrees to absorb loading (answer, page 3). Based on this teaching, the examiner concludes that it would have been obvious to one of ordinary skill in the art to modify the air bag of Matsumoto et al. such that

Appeal No. 95-4379
Application 08/116,753

the fabric (C) was oriented in warp and weft at an angle of about 45 degrees to the fabric (A) . . . so as to allow fabric (C) to be resilient and absorb loads. Such an orientation is old and well known in the air bag art. [Answer, page 4].

We cannot accept this position. Sheets 7 and 8 of Takada are elements of fastening members 4A, 4B provided respectively in the centers of the gas inlet side and the passenger impact side of the air bag for the purpose of attaching the four inflation control straps 5 to the air bag. While it is true that the warp and weft of the fabrics of sheets 7 and 8 lie on the bias relative to Takada's inflation control straps to impart resilience to the fabrics and allow for better shock absorption (column 3, line 19 to column 4, line 2), the function of the sheets 7 and 8 is fundamentally different than the function of the gas permeable sections of the air bags of Matsumoto and appellants. Specifically, while the function of Matsumoto's section 84, akin to appellants' gas permeable section, is to provide for the controlled venting of hot gases from the air bag during deployment, sheets 7 and 8 of Takada, in marked contrast, act as reinforcing elements for the purpose of providing a secure attachment of the inflation control straps 5 to the air bag. As aptly noted by appellants

on page 7 of the brief, Takada does not teach providing the air bag thereof with any gas permeable fabric section whatsoever for the purpose of venting hot gases as the air bag deploys.³ We also observe that, in contrast to that which is called for in the last paragraph of claim 2, Takada is silent as to the orientation of the warp and weft of the fabric of sheets 7 and 8 relative to the warp and weft of the fabric of the air bag wall itself (as opposed to the inflation control straps). Also conspicuously absent from the teachings of the applied references is any indication that overstressing of Matsumoto's gas permeable section is a concern.

Based on (1) the fundamental differences in function of Takada's sheets 7 and 8 as compared to the function of Matsumoto's gas permeable section 84, (2) the failure of Takada to disclose the orientation of the warp and weft of the fabric of sheets 7 and 8 relative to the warp and weft of the air bag wall itself, and (3) the failure of the references to indicate that overstressing of Matsumoto's gas permeable

³ Although not expressly stated, it appears that Takada relies on the centrally located opening 21 in the side of the air bag facing the occupant for venting hot gases.

Appeal No. 95-4379
Application 08/116,753

section is a concern, we conclude that the examiner's proposed modification of Matsumoto in view of Takada to arrive at the claimed warp and weft limitation found in the last paragraph of claim 2 is based on the use of impermissible hindsight knowledge gleaned from reading appellants' disclosure rather than anything that is fairly suggested by the collective teachings of Matsumoto and Takada. In this regard, we conclude that Takada at best would have suggested providing Matsumoto with inflation control straps, and fastening members therefor made of fabric oriented to lie on

a bias to such inflation control straps. This, of course, would not correspond to the warp and weft limitations found in the last paragraph of claim 2.

We have also carefully reviewed the Kami reference additionally relied upon by the examiner in support of the rejection, but find nothing therein that makes up for the deficiencies of Matsumoto and Takada noted above. It follows that the standing § 103 rejection of claims 2-5 as being unpatentable over Matsumoto in view of Takada and Kami cannot

Appeal No. 95-4379
Application 08/116,753

be sustained.

The decision of the examiner is reversed.

REVERSED

	IAN A. CALVERT)	
	Administrative Patent Judge)	
)	
)	
	IRWIN CHARLES COHEN)	BOARD OF
PATENT	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
	LAWRENCE J. STAAB)	
	Administrative Patent Judge)	

Appeal No. 95-4379
Application 08/116,753

Evenson, McKeown, Edwards & Lenahan
1200 G Street, N.W.
Washington, DC 20005

LJS/ki