

**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(2) is not binding precedent of the Board.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

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte HANS BRANDNER  
and HANS JARDIN

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Appeal No. 1996-2218  
Application 08/154,422<sup>1</sup>

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HEARD: Nov. 4, 1999

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Before GARRIS, WALTZ, and LIEBERMAN, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

**DECISION ON APPEAL**

This is an appeal under 35 U.S.C. § 134 from the  
examiner's refusal to allow claims 14 through 19 which are all  
the claims

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<sup>1</sup>Application for patent filed November 19, 1993.

remaining in the application.

#### THE INVENTION

The invention is directed to a molding process for manufacture of a cover unit of a vehicle roof. The process includes the following steps:

1. A cover plate **3** is placed onto the reinforcing frame **4**.
2. A reinforcing frame **4** and the cover plate **3** is placed in the center of a lower mold **14**.
3. A resiliently deformable peripheral seal **5** is placed in the mold so that an encircling edge gap sealing profile of the seal extends along the inner edge of the mold. The seal is placed such that an interspace remains between the peripheral seal **5** and both the cover plate **3** and the reinforcing frame **4**.
4. The mold is closed.
5. Synthetic plastic material is injected into the interspace so as to surround an inwardly directed part of the peripheral seal, mold the rigid seal receiving frame,

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connect the cover and the reinforcing frame and form an encircling groove in the seal receiving frame.  
6. The mold is opened and the unit is removed therefrom.

#### **THE CLAIM**

Claims 14 is illustrative of appellants' invention and is reproduced below.

14. Process for the manufacture of a cover unit of a vehicle roof, which can be opened, and which has a cover plate, a reinforcing frame arranged therebelow, and a rigid seal-receiving frame injection molded around an outer periphery of the cover plate and reinforcing frame, the seal-receiving frame having an encircling groove on an outer periphery thereof for receiving a resiliently deformable peripheral seal, comprising the steps of:

a. placing the cover plate onto the reinforcing frame and placing the cover plate and the reinforcing frame into the center of a mold so that the mold peripherally surrounds the reinforcing frame and cover plate at a distance therefrom;

b. inserting said resiliently deformable peripheral seal into the mold so that an encircling edge gap sealing profile of the seal extends along an inner edge of the mold while leaving an interspace between peripheral seal and both the cover plate and reinforcing frame;

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c. closing the mold and injecting a synthetic plastic material into the interspace so as to mold the rigid seal-receiving frame connecting the cover plate and reinforcing frame and simultaneously forming said encircling groove in the seal-receiving frame by surrounding an inwardly directed part of the peripheral seal with said plastic material and using said inwardly direct part as a core for directly forming said encircling groove in the seal-receiving frame; and

d. opening the mold and removing a finished cover unit.

**THE REFERENCES OF RECORD**

As evidence of obviousness, the examiner relies upon the following references:

Knights et al. 1979 (Knights)	4,151,696	May 1,
Kulla	4,259,135	Mar. 31, 1981
Bohm et al. (Bohm)	4,738,482	Apr. 19, 1988
Leone et al. (Leone)	5,069,852	Dec. 3, 1991
Jardin et al. (Jardin)	5,344,603	Sep. 6, 1994

(filed Feb. 28, 1992)

**THE REJECTION**

Claims 14 through 19 stand rejected under 35 U.S.C. § 103 as unpatentable over Bohm in view of Kulla or Knights in further view of Leone and Jardin.

**OPINION**

We have carefully considered all of the arguments advanced by appellants and the examiner and agree with

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appellants that the aforementioned rejection is not well founded. Accordingly, we will not sustain the rejection.

"[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The examiner relies upon a combination of five references to reject the claimed subject matter. It is the position of the examiner that the primary reference to Bohm fails to teach that the frame is molded between the seal member, the lid cover and the reinforcing member. However, the secondary references teach injecting between two preforms. Hence it would have been obvious to position the sealing member spaced from the lid cover and form the frame in situ. See Answer, pages 3 and 4. We disagree with the examiner's analysis and position.

Bohm discloses a rigid lid for an automobile roof wherein a one piece rigid plastic frame **8** is molded around a lid plate **9** and reinforcing frame **10**. During the molding operation, the fixing elements for the edge gap sealing member are integrally formed. See Bohm, column 2, lines 33-64,

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column 5, lines 23-24 and Figure 2. Thereafter "the edge gap sealing profile member **4** is always fixed by pushing onto the plastics frame **8**." See column 6, lines 27-30. There is no teaching in Bohm of using the edge gap sealing profile member as an integral part of the mold prior to the molding operation.

Moreover, the claimed subject matter requires a "resiliently deformable peripheral seal"<sup>2</sup> and one wherein the molding operation includes "surrounding an inwardly directed part of the peripheral seal with said plastic material." Accordingly, the secondary references relied upon by the examiner would need to teach those elements of the process required by the claimed subject matter and not taught by Bohm. They do not.

The reference to Knights is directed to a framed window panel. We find a glazed sheet of material **12** is inserted between two parallel flanges **10** and **11** of an aluminum bar **7**. We find that sealing material is thereafter injected into the

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<sup>2</sup>Resilient is defined as, "capable of withstanding shock without permanent deformation or rupture." Webster's Ninth Collegiate Dictionary, Merriam Webster Inc., Springfield, MA., Page 1003, 1986.

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cavity **17**. Our analysis of the reference concludes that the aluminum frame of the reference is not an edge gap resilient material. There is no deformable material, and logically the sealant does not surround a deformable material. It connects two rigid materials.

A similar analysis applies to Kulla. We find that patentee inserts a double glass frame **20** into a window frame **14** having a side wall **10** and a bottom wall **12**. See Figure 1. A heat sealing mass is used in mounting the panes in the frames. See column 3, lines 52-57. The panes may be prepared from wood, metal or synthetic material. See column 5, lines 8-9. Our analysis of Kulla interprets the reference as providing no teaching that the window frame is resiliently deformable. Accordingly, we conclude that the heat sealing mass of Kulla connects two non-resilient materials. Neither does the process of Kulla disclose a molding operation that includes, "surrounding an inwardly directed part of the peripheral seal with said plastic material." We further conclude that the frame disclosed by Kulla is not a seal.

Jardin is the only reference other than Bohm which teaches a process for the production of a cover unit with a

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seal for a vehicle. Figure 2 of Jardin contains each of the elements of the claimed subject matter, a cover unit **10**, a cover support **11** and an attached peripheral seal **16**. However, a profile unit **13** specifically separates the peripheral seal from the balance of the mold. The space between profile unit **13**, cover part **11** and cover support **11** is filled by introducing an elastomer therein. The elastomer is, however, separated from the peripheral seal, and the profile is made of a harder material than the elastomer that is injected in the mold. See Abstract and column 2, lines 29-32. We conclude that the cover unit of Jardin is specifically designed such that the peripheral seal and the balance of the unit are separated by the profile part and do not directly interact. Based upon the above analysis, we conclude that there is no reason why one of ordinary skill in the art would remove the profile part and use the peripheral seal as part of the mold core.

Leone discloses a molding process wherein glass **3** is introduced into a mold **1** and **2**, and a preformed sealing gasket **4** is fixed to the rim of the glass and the mold. A cavity **6** is thereafter filled with polyurethane. See Figure 1. We

conclude, however, that the function of the seal differs from that of the claimed subject matter. The seal of Leone in contrast to the peripheral seal of the claimed subject matter is in contact with the rigid component, i.e., glass.

Furthermore, its function in the mold is to avoid leakage of the polymer material from the mold. Although polyurethane material is thereafter introduced into the mold, it does not **surround**<sup>3</sup> an inwardly directed part of the peripheral seal as required by the claimed subject matter. It **adheres**<sup>4</sup> to the preformed sealing gasket. See column 2, lines 30-32.

Based upon the above analysis, the examiner has presented no rationale as to why one of ordinary skill in the art would include a resiliently deformable peripheral seal in a mold as part of the mold core and inject a polymer which is capable of deforming and reacting with the seal. Nor has any rationale been presented why a seal which is resiliently deformable and nonreactive with the injected polymer should be utilized.

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<sup>3</sup>Emphasis ours.

<sup>4</sup>Emphasis ours.

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The examiner must show reasons that the skilled artisan with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. We determine that there is no reason, suggestion, or motivation to combine the references in the manner proposed by the examiner. Accordingly, the examiner has not established a prima facie case of obviousness. See In re Rouffet, 149 F.3d 1350, 1357-1358, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998).

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**DECISION**

The rejection of claims 14 through 19 under 35 U.S.C. § 103 as unpatentable over Bohm in view of Kulla or Knights in further view of Leone and Jardin is reversed.

The decision of the examiner is reversed.

**REVERSED**

	Bradley R. Garris	)	
	Administrative Patent Judge	)	
		)	
		)	
		)	
	Thomas A. Waltz	)	BOARD OF
PATENT		)	
	Administrative Patent Judge	)	APPEALS AND
		)	INTERFERENCES
		)	
		)	
	Paul Lieberman	)	
	Administrative Patent Judge	)	

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