

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RODNEY P. EHRLICH

Appeal No. 2004-0753
Application No. 10/120,096

ON BRIEF

Before COHEN, STAAB, and MCQUADE, Administrative Patent Judges.
MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Rodney P. Ehrlich appeals from the final rejection of claims 37 through 41, 43 through 50 and 52, all of the claims pending in the application.

THE INVENTION

The invention relates to a joint between adjacent panels in the sidewall of a trailer body. Representative claim 37 reads as follows:

37. A joint between side panels adapted for use in a sidewall of a trailer body and the like, comprising:
a pair panels, each said panel having opposite end portions and a middle portion therebetween, each said panel being comprised of an inner skin, an outer skin and a core member between said inner skin and outer skin, said inner skins at said

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opposite end portions of each said panel being offset from said inner skins at said middle portion of each said panel;

a logistics plate member associated with said inner skins at said offset opposite end portions thereof for spacing at least a portion of said panel end portions apart from each other a predetermined distance, said logistics plate member having a plurality of apertures therethrough for acceptance of an associated member; and

a splicing member associated with said outer skins at said opposite end portions thereof for joining said outer skins together.

THE PRIOR ART

The references relied on by the examiner to support the final rejection are:

Yurgevich et al. (Yurgevich)	5,066,066	Nov. 19, 1991
Higham British Patent Document	2 107 258	Apr. 27, 1983

THE REJECTION

Claims 37 through 41, 43 through 50 and 52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Higham in view of Yurgevich.

Attention is directed to the main and reply briefs (Paper Nos. 12 and 14) and to the final rejection and answer (Paper Nos. 8 and 13) for the respective positions of the appellant and the examiner regarding the merits of this rejection.

DISCUSSION

I. Grouping of claims

On page 5 in the main brief, the appellant states that "[r]ejected claims 37-41, 43-50 and 52 stand or fall together." In accordance with this grouping, and pursuant to 37 CFR § 1.192(c)(7), we shall decide the appeal on the basis of representative claim 37 alone, with claims 38 through 41, 43 through 50 and 52 standing or falling with claim 37.

II. The merits

Higham, the examiner's primary reference, pertains to "insulated vehicle bodies e.g. for the refrigerated transport of food stuffs" (page 1, lines 6 and 7). To permit the use of mass production techniques, the sidewalls of the vehicle bodies consist of substantially identical wall modules assembled together (see page 1, lines 20 through 40). As described by Higham,

[t]he wall modules are preferably formed by an outer and an inner skin of suitable material, for example [aluminum] or [aluminum] alloy, the skins being interconnected at the lateral edges of the modules. In this way each wall module is a box shape in transverse cross-section. Preferably, the box is filled with in situ formed polyurethane foam. The in situ forming of polyurethane foam not only provides excellent thermal insulation properties, but effectively bonds the outer and inner skins to each other over the entire area thereof, thereby producing a particularly rigid panel requiring only relatively thin outer and inner skins.

Preferably the lateral edges of the modules are formed by material having a low coefficient of thermal conductivity, for example a plastics material. In the preferred embodiment an [aluminum] alloy extrusion is secured to each lateral edge of each skin of a wall module, and opposing extrusions are connected together by an extruded polypropylene or PVC member which is slid into interlocking engagement with the extrusions it connects [page 1, lines 81 through 103].

Of particular interest is Higham's disclosure of the joint between adjacent wall modules:

Referring now to Figure 2 the opposite lateral edges of two adjacent wall modules 1A, 1B are shown. The modules 1A, 1B are similar those illustrated in Figure 1 except that the edge portion 5 of each skin 2, 3 is secured by rivetting to a generally L-shaped [aluminum] alloy extrusion 9. Each extrusion is formed with a longitudinally extending slot 10 communicating with an enlarged longitudinally extending passage 11. Adjacent extrusions 9 of each module are interconnected by a plastics extrusion 12 having a relatively thin central web portion and enlarged lateral edges complementary to the passage 11. It will be appreciated that to assemble a wall module as illustrated in Figure 2 extrusions 9 are first secured to edge portions 5 of the skins, and thereafter two skins are assembled together by sliding a plastics extrusion 12 into the aligned passages of the skins. Further, it will be appreciated that the lefthand edge of the module 1A which is not shown in Figure 2 is identical to the lefthand edge of the module 1B as illustrated in Figure 2, and similarly the righthand lateral edge of the module 1B is the same as the righthand edge of the module 1A illustrated in Figure 2.

The joint between the modules 1A, 1B is formed by a generally T-shaped [aluminum] alloy extrusion 13 which is secured by rivets through the edge portions 5 of the skins to the extrusions 9. The extrusion 13 is located on the exterior of the vehicle body and

presents a neat appearance to the joint between adjacent wall modules. The joint on the interior of the vehicle may be formed similarly to the exterior joint, or may simply be formed by means of a cap member 14 of extruded [aluminum] alloy or plastics material which is snapped into place to cover the joint.

It will be appreciate from Figure 2 that no structural pillar spanning the thickness of the wall is required at the joint between adjacent wall modules, and that the thermal conductivity of the joint is low because no metal member bridges the gap between the interior and the exterior skins of the wall at the joint [page 2, lines 22 through 66].

Also of note is that the lateral edges of each skin are formed with joggles 4 which offset the extreme edge portions of the skins toward the opposite skin. As shown in Figure 2, the extrusions 13 and/or cap member 14 lie within the offsets so as to be essentially flush with the interior or exterior surfaces of the modules.

The appellant does not dispute the examiner's finding (see page 2 in the final rejection) that the joint disclosed by Higham meets all of the limitations in representative claim 37 except for the one relating to the "logistics plate member." Although each of Higham's interior extrusion 13 and cap member 14 alternatives constitutes a plate member associated with the inner skins at the offset opposite end portions thereof for spacing at least a portion of the panel/module end portions apart from each other a predetermined distance as recited in the claim, such

plate member does not have a plurality of apertures therethrough for acceptance of an associated member, and hence does not embody a "logistics" plate member. To cure this shortcoming, the examiner turns to Yurgevich.

Yurgevich discloses a vehicle trailer 10 having side walls 16 and 18 composed of a plurality of flat rectangular plates 32, each formed of a thin aluminum skin bonded to the sides of a polymeric plastic core. Joining members in the form of vertically oriented strips connect the panels to one another. According to Yurgevich, "it has been found that in certain locations it is desirable to provide a joining member which includes means for receiving logistics fasteners and fittings on an inner surface thereof" (column 4, lines 47 through 51).

Figure 5 shows one such embodiment:

[T]he joining member 78 includes an outer rectilinear strip 80 fixed to the outer surface of plates 32 and an inner rectilinear strip 82 fixed to the inner surface of the plates 32 by a common set of fasteners 84 and 86 which pass through both outer and inner rectilinear strips 80 and 82 as well as the plates 32. It is important to note that the plates 32 are spaced apart from each other. The inner surface 88 of the outer rectilinear strip 80 includes a pair of flanges 90 and 92 which project between the margins of the plates 32 to contact surface 94 of inner strip 82. A channel 96 of uniform depth is provided between the two flanges 90 and 92. The channel 96 is aligned with a plurality of openings 98 in the inner rectilinear strip 82 which were adapted to receive various logistics fittings [column 4, lines 53 through 67].

In proposing to combine Higham and Yurgevich to reject claim 37, the examiner concludes that "it would have been obvious to one of ordinary skill in the art to provide in Higham apertures in the logistics plate member [i.e., interior extrusion 13 or cap member 14] as taught by Yurgevich et al. in order to secure cargo" (final rejection, pages 2 and 3). As so modified in view of Yurgevich, the Higham panel/module joint would respond to all of the limitations in the claim.

The appellant counters that the examiner's conclusion of obviousness is unsound because it stems from impermissible hindsight. The following passage fairly summarizes the appellant's position:

If the cap member (14) [or extrusion (13)] of Higham '258 were to have a plurality of apertures therethrough for the acceptance of an associated member, the superior insulation that is coveted by Higham '258 would be lost as the refrigeration would be able to leak through the apertures, into the joint, thus leaving only the [exterior] T-shaped extrusion (13) between the refrigeration and the outside of the vehicle body. Such a structure would be counterproductive to the problem that Higham '258 was trying to solve, i.e., providing an improved method of constructing insulated vehicle bodies.

. . .
Moreover, if the apertures of Yurgevich '099 were added to Higham '258's connecting members, Higham '258 would be inoperable as Higham '258 specifically discloses connecting members that have extra material extending into the open space [between the modules]. If the apertures of Yurgevich '099 were added, Higham '258 would not be able to have the extra material

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extend into the open space between the modules, as this area would now have to be open so that logistics members could be attached therethrough [main brief, page 7 and 8].

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

In the present case, the teaching by Yurgevich of the desirability of providing a trailer body with an interior panel-joining member having apertures for receiving logistics fasteners and fittings would have furnished the artisan with ample suggestion or motivation to similarly provide Higham's interior extrusion 13 or cap member 14 with such apertures, thereby transforming it into a logistics plate member of the sort recited in claim 37. The appellant's arguments that this modification would frustrate Higham's desire for a well insulated vehicle body and render the vehicle body inoperable are not well taken. To begin with, the record contains no evidence to support the rather dubious proposition that the provision of logistics apertures on one of the many interior joining members in Higham's vehicle body

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would adversely affect its insulating properties to any appreciable extent. Furthermore, the appellant has not cogently explained, and it is not apparent, why the provision of such apertures would require the elimination of the joining member portions which extend between and space the panels/modules. On balance, the unfounded and/or minimal drawbacks argued by the appellant pale in the light of the strong motivation or suggestion to modify Higham in the manner proposed stemming from the express teaching by Yurgevich of the desirability of logistics apertures.

Thus, on the record before us, the combined teachings of Higham and Yurgevich justify the examiner's conclusion that the differences between the subject matter recited in claim 37 and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. We shall therefore sustain the standing 35 U.S.C. § 103(a) rejection of claim 37, and claims 38 through 41, 43 through 50 and 52 which stand or fall therewith, as being unpatentable over Higham in view of Yurgevich.

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SUMMARY

The decision of the examiner to reject claims 37 through 41, 43 through 50 and 52 is affirmed.

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

AFFIRMED

IRWIN CHARLES COHEN)	
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