

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte ROCH J. TOLINSKI and STEVEN J. ENGELGAU

Appeal No. 2004-2346
Application No. 09/876,519

ON BRIEF

Before ABRAMS, MCQUADE and BAHR, Administrative Patent Judges.
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 4, 6-14, 16-18 and 20, which are all of the claims pending in this application. Claim 2 was canceled and claims 1, 4 and 16 were amended subsequent to the final rejection in an amendment filed August 2, 2002 (Paper No. 5).

We REVERSE.

BACKGROUND

The appellants' invention relates to a sunroof assembly for a vehicle. A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The examiner relied upon the following prior art references of record in rejecting the appealed claims:

Minnick, Jr. (Minnick)	3,657,992	Apr. 25, 1972
Rich	4,787,665	Nov. 29, 1988
Racine et al. (Racine)	5,464,267	Nov. 7, 1995
Pokorney et al. (Pokorney)	5,988,839	Nov. 23, 1999
Staser et al. (Staser)	6,305,740	Oct. 23, 2001 (filed Aug. 24, 2000)

The following rejections are before us for review.^{1,2}

Claims 1, 2 and 4 stand rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Racine.

Claim 6 stands rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Minnick.

Claims 9, 10, 12 and 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Rich.

¹ According to the examiner, the rejection under the second paragraph of 35 U.S.C. § 112 was overcome by the amendment after final. See Paper No. 6.

² Although the examiner only addresses rejections of claims 1, 6, 9, 10 and 17 in the answer, we presume that this is because appellants' brief only addresses rejections of these claims and simply groups the remaining claims with claim 1, claim 9 or claim 17. We thus presume that the appellant did not intend to withdraw the appeal with regard to claims 4, 7, 8, 11-14, 16, 18 and 20 and that the examiner intended to maintain the rejections of these claims. In light of our disposition of these rejections, infra, appellants are not prejudiced by our treatment of these claims as being involved in this appeal.

Claim 7 stands rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Minnick and Rich.

Claim 8 stands rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Minnick, Rich and Pokorney.

Claims 11 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Rich, Racine and Minnick.

Claims 16-18 and 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Rich and Pokorney.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 10) for the examiner's complete reasoning in support of the rejections and to the brief (Paper No. 20) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

We turn our attention first to the rejection of claim 1 as being unpatentable over Staser in view of Racine. Staser discloses an automotive vehicle having a moveable

roof panel 12. The movement of the roof panel 12 between open and closed positions is powered by an electrical motor that drives an outer sprocket 66, via a gear reduction unit 64. Two flexible drive cables 68, 70 drivingly engage opposite sides of sprocket 66. One end of cable 68 is attached to a drive link 43 that is rotatably attached to the hub of a forward support roller 36 of the forward roller assembly 32 of the roof panel 12 at the right side as viewed in Figure 7 and the opposite end portion of cable 68 slides in a channel 72 in the fixed rail 20 at the left side of the roof 18 as viewed in Figure 7. Cable 70 is attached to a drive link 43 that is rotatably attached to the hub of the forward support roller 36 of the moveable panel roller assembly at the left side as viewed in Figure 7 with its opposite end portion slidably received in a channel in the fixed rail at the right side of roof 18. Consequently, the moveable roof panel 12 is pulled forward when the sprocket 66 is rotated clockwise and pushed rearward when the sprocket 66 is rotated counterclockwise. Guide tabs 73, 74 are provided at sprocket 66 for cables 68, 70, respectively. According to Staser, “[o]ther guides may be provided as needed.” As illustrated in Figure 7, the drive motor 62, gear reduction unit 64 and sprocket 66 are housed within an air dam 54.

The examiner concedes that Staser lacks “a take-up tube supported by said deflector and receiving a portion of said at least one drive element with said sunroof in said open position” as called for in claim 1. To overcome this deficiency, the examiner relies on the teaching of Racine of a guide tube 90 (see Figure 5) included in the

moving mechanism 86 of a sun roof assembly 16. Racine's sun roof assembly includes a pair of elongated tracks 20 as part of a stationary frame assembly 18, with a mounting arm 22 associated with each track, the sun roof panel 24 being fixedly mounted on the two mounting arms. The moving mechanism includes a drive which turns an output gear. A pair of flexible members 88 formed by cables having a coil on the exterior thereof are associated with each track 20, with the teeth of the output gear meshing with the coils on flexible members 88. Each member 88 is mounted within a guide tube 90 so as to extend transversely along the front portion of the stationary frame assembly 18 in meshing engagement with the output drive gear. Each tube is bent rearwardly and communicated with the front end of the associated track 20, with the elongated member 88 extending from the tube 90 and being fixed to the connecting rod 36 of the associated sliding member 30 of the mounting mechanism connected to the associated mounting arm 22. According to the examiner (answer, page 4), it would have been obvious to provide in Staser a take-up tube (guide tube 90) as taught by Racine as an obvious expedient to prevent objectionable noise, which the examiner contends "is a predominant indicator of warranty complaints in the industry and therefore has significant priority for elimination in design parameters."

Rejections based on 35 U.S.C. § 103 must rest on a factual basis. In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation,

unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

As pointed out by appellants on page 1 of the reply brief, the examiner has provided no factual support for the position that the Staser configuration would result in noise. In fact, appellants' argument on pages 6-7 of the brief, that Staser's channel 72, which is disposed outside of the air dam 54, acts as a take-up tube and that, as such, there would be no need to locate a take-up tube in the deflector (air dam) and support it by the deflector (brief, pages 6-7), appears to be well taken. Appellants, on the other hand, use take-up tubes because appellants' cables have loose ends within the deflector that must be guided. For the foregoing reasons, we conclude that the examiner's proposed modification of Staser stems from improper hindsight, inasmuch as the stated motivation therefor lacks factual support in the record.

In light of the above, we shall not sustain the rejection of claim 1, or the like rejection of claims 2 and 4 depending therefrom, as being unpatentable over Staser in view of Racine.

We now turn our attention to the rejection of claim 6 as being unpatentable over Staser in view of Minnick. The examiner acknowledges that Staser lacks the housing including an access panel for permitting access to the drive motor, as called for in claim 6. Minnick discloses a vehicle cab ventilator unit to be affixed to the roof of a cab

of a vehicle, such as an agricultural vehicle, to protect the vehicle operator from dust and mist encountered in, for example, pesticide spraying operations. The ventilator unit includes a casing 20 in which are housed a plurality of filter devices 40-44. The casing 20 is provided with a removable panel section 36 to facilitate the removal of filter devices 40-44 (column 2, lines 20-26). Like appellants, we find no suggestion in the teaching of such an access panel for the removal and replacement of filter devices to provide an access panel in the air dam housing of Staser to provide access to any of the components therein. Accordingly, we shall not sustain this rejection.

Claims 9, 10, 12 and 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Staser in view of Rich. Staser discloses an electrical motor 62 and motor controller 76 housed within the air dam 54 but does not disclose the motor having electrical leads extending through a hole in the housing and an opening in the vehicle roof, as called for in claim 9. Rich discloses an automotive roof spoiler having retractable lamps, with a motor 36 housed within the body portion 22 thereof and a line 39 illustrated schematically leading from the motor to a switch 38 in the passenger compartment of the vehicle. It is the examiner's position that it would have been obvious to provide in Staser's assembly an opening in the roof aligned with the bottom hole in the housing (air dam 54), which the examiner submits is illustrated in Figure 2 of Staser, in order to pass an electrical lead as taught by Rich to either the motor controller 76 or the motor 62 (answer, page 6).

Even assuming that Staser does illustrate a hole in the bottom of the air dam housing in Figure 2, we find no suggestion in either of the applied references to modify Staser to provide the motor 62 with electrical leads which extend through said hole and an opening in the vehicle roof so as to arrive at appellants' claimed invention. In light of Staser's disclosure that the motor 62 is energized by a motor controller 76, appellants' argument on page 8 of the brief that any electrical leads extending through the roof and into the air dam housing would presumably be electrical leads from the motor controller 76, not the motor 62 itself, is well taken. We do not share the examiner's view that this would satisfy the language of claim 9 and find no suggestion in the applied references to run electrical leads directly to the motor 62 from inside the vehicle passenger compartment.

For the reasons discussed above, we cannot sustain the examiner's rejection of claim 9 or claims 10, 12 and 13 depending therefrom. Inasmuch as the rejections of claim 7 as being unpatentable over Staser in view of Minnick and Rich, claim 8 as being unpatentable over Staser in view of Minnick, Rich and Pokorney and claims 11 and 14 as being unpatentable over Staser in view of Rich, Racine and Minnick are grounded in part on the examiner's flawed determination, discussed above, with regard to providing Staser's motor with electrical leads extending through a hole in the housing and an opening in the roof, it follows that we also cannot sustain these rejections.

Claims 16-18 and 20 all require a seal between the housing and the exterior surface of the vehicle roof, a feature which is not disclosed by Staser. To overcome this deficiency, the examiner points to the teaching in Pokorney of permitting electrical communication between the interior of a rear-mounted light bar 10 and the means for controllably supplying power to the light heads and alley lights thereon by the provision of one or more holes in the vehicle roof and the passage of electrical cables through grommets installed in these holes in a water-tight manner. This teaching of Pokorney, at best, might have suggested the passage of electrical cables from within the air dam housing of Staser to the vehicle interior in a water-tight manner through grommets. Like appellants (brief, page 8), we fail to appreciate how such a modification of Staser would necessarily result in a seal between the housing and the exterior surface of the vehicle roof. The examiner's conclusion that it would have been "obvious to provide [a seal] at the lower flanges of the housing of Staser et al. in order to prevent water degradation of the motor 64 [sic. 62] and controller 76, both electrical devices subject to water damage" (answer, page 6) does not logically follow from the combined teachings of Staser, Rich and Pokorney. We thus cannot sustain the rejection of claims 16-18 and 20.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 4, 6-14, 16-18 and 20 under 35 U.S.C. § 103 is reversed.

REVERSED

NEAL E. ABRAMS
Administrative Patent Judge

JOHN P. MCQUADE
Administrative Patent Judge

JENNIFER D. BAHR
Administrative Patent Judge

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