

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 17

**UNITED STATES PATENT AND TRADEMARK OFFICE**

---

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

---

Ex parte AIMONE BALBO DI VINADIO

---

Appeal No. 2003-1806  
Application No. 09/592,578

---

ON BRIEF

---

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

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 7 to 10, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellant's invention relates to hinges for an opening door or window frame (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellant's brief.

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

Green et al. (Green)	5,755,011	May 26, 1998
Wilms	DE 26 28 951.0 <sup>1</sup>	Jan. 5, 1978
Balbo	WO 98/41720	Sept. 24, 1998

Claims 7 to 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Balbo in view of Wilms and Green.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the final rejection (Paper No. 8, mailed January 29, 2002) and the answer (Paper No. 13, mailed October 21, 2002) for the examiner's complete reasoning in support of the rejection,

---

<sup>1</sup> In determining the teachings of Wilms, we will rely on the translation of record provided by the USPTO.

and to the brief (Paper No. 12, filed July 24, 2002) for the appellant's arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 7 to 10 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claim 7, the only independent claim on appeal, reads as follows:

A hinge for an opening door or window frame having a general plane and including a movable frame and a fixed frame, said hinge comprising one first and at least one second knuckle part each provided with a leaf for fixing it to said movable frame and to said fixed frame respectively of the door or window, a pin which connects said first and second knuckle parts together such that they can rotate, and adjustment means allowing adjustments to be made between said first and second knuckle parts in a direction perpendicular to the general plane of the door or window, said adjustment means including a sleeve which is adjustably mounted in said second knuckle part for angular adjustment about a longitudinal axis of the sleeve and has an eccentric cylindrical cavity into which said pin is inserted, wherein said sleeve has a bottom wall which closes off the cavity at the bottom thereof, said bottom wall and the end of the pin that faces it both having an essentially hemispherical and mutually complementary shape, and further comprising means for adjusting the height of the first knuckle part relative to the second knuckle part, said means including a lower support for said sleeve engaged inside said second knuckle part such that the lower support can move axially, wherein said support and said sleeve have surfaces that come into mutual axial contact and are hemispherical in shape with the hemispherical surfaces of the bottom wall and the support being concave with the concavity of each facing toward each first knuckle part.

In the rejection under 35 U.S.C. § 103 before us in this appeal (final rejection, pp. 2-3), the examiner (1) set forth the pertinent teachings of the applied prior art; (2) ascertained<sup>2</sup> that the differences between Balbo and the claims at issue were (a) "mutually complementary spherical shaped surfaces of the hinge pin and sleeve" (i.e., said bottom wall and the end of the pin that faces it both having an essentially

---

<sup>2</sup> After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

hemispherical and mutually complementary shape) and (b) "means for adjusting the height including a support" (i.e., means for adjusting the height of the first knuckle part relative to the second knuckle part, said means including a lower support for said sleeve engaged inside said second knuckle part such that the lower support can move axially, wherein said support and said sleeve have surfaces that come into mutual axial contact and are hemispherical in shape with the hemispherical surfaces of the bottom wall and the support being concave with the concavity of each facing toward each first knuckle part); and (3) concluded that it would have been obvious to have modified Balbo's hinge to include (a) complementary spherical shaped surfaces on the hinge pin 22 and sleeve 28 as suggested and taught by Wilms and (b) means for adjusting the height of the first knuckle part relative to the second knuckle part as suggested and taught by Green.

The appellant argues (brief, p. 6) that while the patent to Green discloses means for adjusting the height of the first knuckle part relative to the second knuckle part, Green's adjusting means fails to include hemispherical surfaces on the bottom wall of the sleeve and on the support which are concave with the concavity of each facing **toward** the first knuckle part.<sup>3</sup> We agree. At best, Green's means for adjusting the height of the first knuckle part relative to the second knuckle part includes

---

<sup>3</sup> The examiner did not respond to this argument in the answer.

hemispherical surfaces on the bottom wall of the sleeve and on the support which are concave with the concavity of each facing **away from** the first knuckle part. Thus, even if it would have been obvious at the time the invention was made to a person of ordinary skill in the art to have modified Balbo's hinge to include both complementary spherical shaped surfaces on the hinge pin and sleeve as suggested and taught by Wilms and means for adjusting the height of the first knuckle part relative to the second knuckle part as suggested and taught by Green such would not arrive at the claimed invention.

For the reasons set forth above, the decision of the examiner to reject independent claim 7, and claims 8 to 10 dependent thereon, under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 7 to 10 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN  
Administrative Patent Judge

LAWRENCE J. STAAB  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

)  
)  
)  
)  
)  
) BOARD OF PATENT  
) APPEALS  
) AND  
) INTERFERENCES  
)  
)  
)  
)

Appeal No. 2003-1806  
Application No. 09/592,578

Page 8

SUGHRUE MION ZINN MACPEAK & SEAS  
2100 PENNSYLVANIA AVENUE N W  
WASHINGTON, DC 20037-3202

JVN/jg