

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT M. BRAY

Appeal No. 2006-1669
Application No. 10/476,257
Technology Center 3600

Before FRANKFORT, BAHR and FETTING, *Administrative Patent Judges*.
BAHR, *Administrative Patent Judge*.

DECISION ON REHEARING

This is a decision on appellant's request for rehearing under 37 CFR § 41.52(a)(1) (filed September 26, 2006) of our decision mailed July 26, 2006, in which we reversed the rejection of claims 24 and 25 under 35 U.S.C. § 112, first paragraph, and affirmed the rejection of claims 1-7, 11-15, 20, 21, 23, 25 and 26 under 35 U.S.C. § 102(b) as being anticipated by Allen, the rejection of claims 8-10 and 16-18 under 35 U.S.C. § 103(a) as being unpatentable over Allen in view

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of Lavelle and the rejection of claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Allen. The appellant requests reconsideration only of that portion of our decision affirming the rejections under 35 U.S.C. §§ 102(b) and 103(a).

In the request, the appellant persists in his untenable position that the claim term “winglet” is by definition a *fixed* upturned tip on a wing. We explained on pages 5 and 6 of our decision the basis for our conclusion that the term “winglet” would not have been understood by one of ordinary skill in the art as requiring a fixed mounting to the wing. The use of the term “winglet” in the Allen, Daude and Brix patents, all within the field of appellant’s invention, in the context of a structure that is moveable relative to the wing on which it is mounted clearly evidences that this term was not construed as narrowly as appellant urges. This is not a case, as appellant would have us believe, where the Allen patent has uniquely used the term “winglet” in a manner inconsistent with an established meaning within the art.

The appellant’s argument (request, p. 4) that this panel’s conclusion (decision, p. 3) that one of ordinary skill in the art would infer from the appellant’s specification in its entirety that the winglet 12 discussed therein is fixed, in reversing the examiner’s written description rejection of claims 24 and 25 under 35 U.S.C. § 112, first paragraph, is inconsistent with our refusal to read a “fixed” limitation into the claim term “winglet” is not well taken. While it is true that the claims do not stand alone and must be read in view of the specification, of which they are a part (*see Phillipps v. AWH Corp.*, 415 F.3d 1303, 1315, 75 USPQ2d

1321, 1327 (Fed. Cir. 2005)), we also recognize the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim. We can discern the line between construing terms and importing limitations with reasonable certainty and predictability by remaining focused on understanding how a person of ordinary skill in the art would understand the claim terms. *See Phillipps*, 415 F.3d at 1323, 75 USPQ2d at 1334. For instance, although the specification may describe very specific embodiments of the invention, our reviewing court has repeatedly warned against confining the claims to those embodiments. *Id.*

As mentioned in our decision (p. 3), the appellant’s specification does not expressly state that the winglet 12 is “fixed,” much less define the term “winglet” as being a structure fixedly mounted to the wing. The appellant’s implication on page 4 of the request that the appellant’s specification, at page 1, line 4, defines “winglet” as “a fixed upturned tip on a wing” is a misrepresentation. Appellant’s specification, at page 1, lines 4-7, reads “A winglet generally takes the form of an upturned tip on a wing or other flying surface on an aircraft although the term ‘winglet’ may also embrace an end plate which extends both above and below the upper and lower surfaces at the tip of a wing or other flying surface.” The term “fixed” is not used therein. The fact that one skilled in the art might infer from the appellant’s specification, in particular the problems to be solved by the invention, that the winglet 12 described in the specification is fixed to the wing no more constitutes a definition of “winglet” as being fixed to the wing than the specification’s description of the winglet 12 as having a moveable control surface

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thereon constitutes a definition of the term “winglet” as a structure, having a control surface moveably mounted thereon, at the tip of an aircraft wing.¹

Accordingly, there is nothing in the appellant’s specification that would cause one of ordinary skill in the art to understand that the appellant is using the term “winglet” in a more restricted manner than its customary meaning within the art.

There is strong evidence in the record before us, in the form of the definition of “winglet” as “a small, nearly vertical surface mounted at the tip of an aircraft wing to decrease drag resistance” from the *McGraw-Hill Dictionary of Scientific and Technical Terms* cited on page 8 of the appellant’s brief, from which the term “fixed” is conspicuously absent, and the Allen, Daude and Brix patents, all of which describe winglets, or portions thereof, that are moveable or articulating relative to the wing, that the use of the term “winglet” in the aircraft field is not restricted to structures that are *fixed* to the wing. Accordingly, our determination that Allen’s “winglet” 12 or 14 meets the “winglet” limitation in appellant’s claim 1 (the representative claim selected under 37 CFR § 41.37(c)(1)(vii) to decide the appeal of the rejection of claims 1-7, 11-15, 20, 21, 23, 25² and 26 as being anticipated by Allen (decision, p. 4)), notwithstanding that it is not fixedly mounted to the wing, is supported by the record in this case and was not reached in error.

¹ Likewise, Allen’s description of an articulating winglet does not constitute a definition therein of the term “winglet” as a structure foldably mounted to a wing.

² We recognize that claim 25 includes the limitation “**fixed** winglet” (emphasis added), but claim 25 was not argued in appellant’s brief, reply brief or supplemental reply brief (filed May 24, 2006) separately from claim 1. The rejection of claim 24, which also includes the limitation of a “fixed winglet,” under 35 U.S.C. § 103(a) as being unpatentable over Allen was not mentioned at all by appellant in any of the brief, reply brief or supplemental reply

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brief, much less argued, and was thus summarily sustained, as explained on page 8 of our decision.

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The appellant's argument (request, pp. 7-8) that this panel failed to properly construe the limitation "air flow control arrangement thereon by means of which lift generated by the winglet can be varied" is incorrect. In accordance with 35 U.S.C. § 112, sixth paragraph, this panel determined that the structure described in appellant's specification for performing the function of controlling air flow to vary the lift generated by the winglet, and thus corresponding to the "air flow control arrangement thereon by means of which lift generated by the winglet can be varied" limitation of claim 1, "is the control surface (i.e., flaps, spoilers, trip device, doors, louvers) shown in Figures 5-11" (decision, p. 6). This determination is supported by the appellant's specification (e.g., p. 2 and p. 4, ll. 23-24) and the appellant's statement on page 13 of the reply brief to that effect. As further explained in our decision (p. 6), the aileron depicted on the rear of the winglet 12 in Allen's Figure 1 is a control surface, and in particular a flap or spoiler, the structure described in appellant's specification corresponding to the "air flow control arrangement thereon by means of which lift generated by the winglet can be varied" limitation.

The appellant's arguments on pages 8 and 9 of the request address limitations not included in claim 1 and, in particular, not included in the "air flow control arrangement thereon by means of which lift generated by the winglet can be varied" limitation of claim 1. The structure identified in appellant's specification (p. 2 and p. 4) as the "control arrangement" is the control surface (e.g., flap, trip device, spoiler, etc.). While such control arrangement *may* be linked to a control system of the aircraft, such control system is neither described

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in any detail nor identified as part of the control arrangement. Accordingly, a control system for controlling the operation of the control surface is not recited in claim 1.³ Thus, Allen's failure to describe the control scheme of the aileron depicted on the winglet 12 is of no moment. Allen's winglet 12 clearly generates lift in flight, whether in the folded position or in the extended position, and the aileron located on such winglet is a control surface that controls air flow by means of which lift generated by the winglet can be varied, which is all that claim 1 requires.⁴

The appellant's argument on page 10 of the request that our decision does not establish any reason or motivation for combining the Allen and Lavelle references is incorrect. We explained on page 7 of our decision that the motivation for providing a passage or slot in the winglet 12 or 14 of Allen from a lower surface to an upper surface thereof that can be opened to permit passage of air therethrough for decreasing the distance required for landing as proposed by the examiner (answer, p. 5) is found "in Lavelle's teaching that it was well known in the art at the time of the appellant's invention to replace or supplement the usual ailerons with controlled wing slots so that the entire length of the trailing edge of the wing could be used for landing flaps." That teaching is found in column 1, lines 7-12, of Lavelle. The appellant's contention that "[s]lots and flaps are two

³ While claim 25 recites that the air flow control means is responsive to the load on an aircraft wing, this claim was not argued separately from claim 1 in the brief, reply brief or supplemental reply brief and thus stands or falls with claim 1. Claim 24 additionally recites means for sensing loads on an aircraft and that the air flow control means is responsive to said loads sensing means, but the rejection of claim 24 as being unpatentable over Allen was not argued in the brief, reply brief or supplemental reply brief and was thus summarily sustained, as explained above.

⁴ We also note, in this regard, that claim 1 does not require that the variance of lift be accomplished, or, more

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entirely different structures and, as such, are well known to those of ordinary skill in the art”

particularly, be capable of being accomplished, when the winglet is in any particular orientation.

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(request, p. 10) does not address the modification proposed by the examiner. The modification is not the replacement of landing flaps with slots but, rather, the replacement of ailerons with slots.

In light of the above, the arguments in the appellant's request do not persuade us of any error in our decision. The appellant's request for rehearing has been granted to the extent that we have reconsidered our decision but is denied with respect to making any modification thereto.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a). *See* 37 CFR § 1.136(a)(1)(iv).

DENIED

CHARLES E. FRANKFORT)
Administrative Patent Judge)
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JENNIFER D. BAHR) BOARD OF PATENT
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