

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GERALD A. R. ALLSOPP

Appeal No. 97-1979
Application 08/278,335¹

ON BRIEF

Before MEISTER, McQUADE and CRAWFORD, Administrative Patent Judges.

McQUADE, Administrative Patent Judge.

DECISION ON APPEAL

This appeal is from the final rejection of claims 14 through 20, 22 and 23. Claim 21, the only other claim pending in the application, currently has no rejection applied against

¹ Application for patent filed July 21, 1994.

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it (see the advisory letter dated June 11, 1996, Paper No. 9).

Presumably, claim 21 stands objected to as depending from a rejected base claim.²

The invention relates to "an aerodynamically sound, lighter than air kite/balloon unit" (specification, page 2).

Claim 14 is illustrative and reads as follows:

14. In the combination of a lighter-than-air balloon and a kite, the improvement comprising means fixedly securing a forward portion of said kite to an underside of said balloon against movement of said portion of the kite relative to said underside of the balloon.

The references relied upon by the examiner as evidence of anticipation and obviousness are:

Astle	2,208,786	Jul. 23, 1940
Babbidge	3,791,611	Feb. 12, 1974
Holland, Jr. (Holland)	4,216,929	Aug. 12, 1980

The appealed claims stand rejected as follows:

a) claims 14, 15 and 23 under 35 U.S.C. § 102(b) as being anticipated by Astle;

b) claims 16 and 22 under 35 U.S.C. § 103 as being unpatentable over Astle in view of Holland; and

² The indication on page 3 in the examiner's answer (Paper No. 12) that claim 21 stands rejected is inconsistent with the advisory letter and apparently is the result of an inadvertent oversight on the part of the examiner.

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c) claims 17 through 20 under 35 U.S.C. § 103 as being unpatentable over Astle in view of Babbidge.

Reference is made to the appellant's main and reply briefs (Paper Nos. 11 and 13) and to the examiner's final rejection and answer (Paper Nos. 7 and 12) for the respective positions of the appellant and the examiner with regard to the propriety of these rejections.

Astle, the reference common to all of the rejections, discloses a kite "having an inflatable tube extending circumferentially about its marginal edge and within which air under pressure may be placed to aid in the lifting of the kite while flying the same" (page 1, column 1, lines 3 through 7). The body of the kite consists of a rubber sheet 5 having the inflatable tube 6 secured thereto by vulcanizing or the like (see page 1, column 1, lines 33 through 40). The kite also includes an inflatable tail 15 or 17 attached to the sheet by a string 14. With regard to the standing 35 U.S.C. § 102(b) rejection of claims 14, 15 and 23, anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every

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element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

Independent claim 14 recites a combination which includes a "lighter-than-air balloon." According to the examiner, this limitation is met by Astle's inflatable tube 6 in that "since tube 6 aids in the lifting of the kite, . . . it must be, by definition, lighter-than-air" (answer, page 3). Although Astle's inflatable tube 6 reasonably can be viewed as a balloon, the mere fact that it aids in lifting the kite does not necessarily mean that it is lighter-than-air. For example, the tube 6 might aid in lifting the kite due to its shape and/or structural relationship with the body of the kite. Moreover, Astle expressly discloses that the tube 6 is filled with air. Thus, the examiner's finding that the tube 6 constitutes a lighter-than-air balloon as recited in claim 14 is not well founded. Furthermore, our review of the Astle reference indicates that it does not disclose any other structure which meets the balloon limitations in claim 14.

Accordingly, we shall not sustain the standing 35 U.S.C. § 102(b) rejection of claim 14, or of claims 15 and 23 which

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depend therefrom, as being anticipated by Astle.

Nor shall we sustain the standing 35 U.S.C. § 103 rejection of claims 16 and 22, which depend from claim 14, as being unpatentable over Astle in view of Holland.

The examiner cites Holland for its teachings that kites can be provided with depending keels to attain desired aerodynamic characteristics and that the various components of a kite can be secured together by adhesive tape (see, for example, column 8, lines 26 and 27; and column 10, lines 35 through 37). In short, these teachings do not overcome the above noted deficiencies of Astle with respect to the subject matter recited in parent claim 14.

We shall sustain, however, the standing 35 U.S.C. § 103 rejection of claims 17 through 20, which depend from claim 14, as being unpatentable over Astle in view of Babbidge.

Babbidge discloses a lighter-than-air kite 10 filled with a pressurized gas such as helium to lift the kite in the absence of sufficient wind. The body of the kite is designed to have enhanced thermal insulation and gas retention properties. To this end, the "fabric" of the kite is an envelope 11 made of

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a thin plastic film 12 preferably of polyester [e.g., "Mylar"] because of its dimensional stability, adaptability to metallizing, availability in thin gauges (as low as one-half mil or less), ageing-resistance, and, for its weight, its relatively high tensile strength, resistance to snagging and ripping, and low permeability to light-density gases. . . . Irrespective of the chemical composition of the core 12, however, it is provided, on the surface which forms the interior of the envelope 11, with a metallizing coating 13, preferably (and now easily obtainable) a "thin film" of aluminum conventionally formed by depositing a vapor of aluminum upon the film core 12 in an ultra-high vacuum [column 2, lines 30 through 48].

The test for obviousness 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 and notwithstanding the arguments to the contrary advanced by the appellant, the combined teachings of Astle and Babbidge would have provided the artisan with ample suggestion or motivation (1) to modify the Astle device by making its inflatable tube or balloon 6 lighter-than-air in order to augment its intended lifting function and (2) to implement this modification by employing Babbidge's helium-filled, metal-coated plastic envelope construction to gain the above noted benefits of same. As so

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modified, the Astle device would meet all of the limitations in claims 17, 18 and 20 which have been argued by the appellant.

As for the ellipsoidal balloon shape recited in claim 19, the record does not support the appellant's contention that this particular shape contributes to an aerodynamically sound kite/balloon unit (see page 5 in the main brief). To the contrary, the specification in the instant application indicates that the appellant's aim is "to allow the use of light cheap mass-produced disposable balloons that are easily available and economical" (page 2) and that "[m]any shapes, types and sizes of balloon could be used" (page 2). In this light and since the record fails to establish that the ellipsoidal balloon shape recited in claim 19 solves a stated problem or presents a new or unexpected result, such shape would have been an obvious matter of design choice within the skill of the art (see In re Kuhle, 526 F.2d 553, 555, 188 USPQ 7, 8-9 (CCPA 1975)).

The following new rejections are entered pursuant to 37 CFR § 1.196(b).

Claims 15 and 16 are rejected under 35 U.S.C. § 112,

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second paragraph, as failing to particularly point out and distinctly claim the subject matter the appellant regards as the invention.

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In determining whether this standard is met, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. Id.

Claims 15 and 16 recite, respectively, that the balloon has an extending nose portion and a depending keel. These recitations are unclear and confusing when read in light of the underlying disclosure which indicates that it is the kite, not the balloon, which includes the extending nose portion and depending keel (see, for example, page 2 in the specification).

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Claims 14 through 16, 21 and 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Astle in view of Babbidge and Holland.³

The device disclosed by Astle meets all of the limitations in these claims except for the one in independent claim 14 requiring the balloon to be lighter-than-air, the one in dependent claim 16 requiring a depending keel, the one in dependent claim 21 defining the securing means recited in parent claim 14 to comprise strips of adhesive tape, and arguably the one in claim 14 setting forth the securing means in mean-plus-function format. For the reasons discussed above, it would have been obvious to one of ordinary skill in the art in view of Babbidge to modify the Astle device by making its inflatable tube or balloon component 6 lighter-than-air in order to enhance its desired lifting function. It also would have been obvious to one of ordinary skill in the art in view of Holland to further modify the Astle device by providing its kite body component 5 with a depending keel to attain desired aerodynamic characteristics and to secure the

³ For purposes of this rejection, we have read the word "balloon" in claims 15 and 16 as if it were --kite--.

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kite body component 5 to the tube or balloon component 6 with strips of adhesive tape to facilitate the assembly of the device. In this light, the differences between the subject matter recited in claims 14 through 16, 21 and 23 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.

In summary:

a) the decision of the examiner to reject claims 14 through 20, 22 and 23 is affirmed with respect to claims 17 through 20 and reversed with respect to claims 14 through 16, 22 and 23; and

b) new rejections of claims 14 through 16, 21 and 23 are entered pursuant to 37 CFR § 1.196(b).

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997)), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes

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of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

Should the appellant elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere

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incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for reconsideration thereof.

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

AFFIRMED-IN-PART; 37 CFR § 1.196(b)

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Administrative Patent Judge)	
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JOHN P. McQUADE)	BOARD OF PATENT
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