

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

Paper No. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JACQUES ESPIE,
DANIEL LABARRE
and
MAURICE REY

Appeal No. 1997-4111
Application No. 08/540,947

ON BRIEF

Before CALVERT, COHEN, 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a decision on appeal from the examiner's final rejection of claims 1, 3, 4, 7-9, 11 and 12.¹ Claims 10 and 13 have been withdrawn from consideration under 37 CFR § 1.142(b) as being drawn to a nonelected invention. Claims 2, 5 and 6 have been canceled.

¹ Claim 1 was amended subsequent to the final rejection.

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We AFFIRM-IN-PART.

BACKGROUND

The appellants' invention relates to molds, particularly for the molding of tires (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

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

Cain et al. (Cain) 1989	4,795,331	Jan. 3,
Bartley 1994	5,283,022	Feb. 1,
Espie et al. (Espie) 1995	5,382,402	Jan. 17,

Claims 1, 3, 4 and 11 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the appellants, at the time the application was filed, had possession of the claimed invention.

Claims 7-9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Cain.

Claim 12 stands rejected under 35 U.S.C. § 103 as being unpatentable over Cain.

Claims 1, 3, 4 and 11 stand rejected under 35 U.S.C. § 103 as being unpatentable over Cain in view of either Espie or Bartley.

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. 13, mailed June 10, 1997) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 12, filed March 27, 1997) and reply brief (Paper No. 14, filed July 28, 1997) 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.

The rejection under 35 U.S.C. § 112, first paragraph

We will not sustain the rejection of claims 1, 3, 4 and 11 under 35 U.S.C. § 112, first paragraph.

It is well settled that the written description and enablement requirements are separate and distinct from one another and have different tests. See In re Wilder, 736 F.2d 1516, 1520, 222 USPQ 369, 372 (Fed. Cir. 1984); In re Barker, 559 F.2d 588, 591, 194 USPQ 470, 472 (CCPA 1977); and In re Moore, 439 F.2d 1232, 1235-36, 169 USPQ 236, 239 (CCPA 1971). However, from our reading of this rejection (answer, p. 4) it is unclear to us if this rejection is based on the written description requirement or the enablement requirement or both. Accordingly, we will treat this rejection as being based on each requirement.

The written description requirement

The written description requirement serves "to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him; how the specification accomplishes this is not material." In re Wertheim, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). In order to meet the written description requirement, the appellants do not have to utilize any particular form of disclosure to describe the subject matter claimed, but "the description must clearly allow persons of ordinary skill in

the art to recognize that [he or she] invented what is claimed." In re Gosteli, 872 F.2d 1008, 1012, 10 USPQ2d 1614, 1618 (Fed. Cir. 1989). Put another way, "the applicant must . . . convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." Vas-Cath, Inc. v. Mahurkar, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). Finally, "[p]recisely how close the original description must come to comply with the description requirement of section 112 must be determined on a case-by-case basis." Eiselstein v. Frank, 52 F.3d 1035, 1039, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995) (quoting Vas-Cath, 935 F.2d at 1561, 19 USPQ2d at 1116).

It is our determination that the originally filed specification does provide written description support for the subject matter of claims 1, 3, 4 and 11. In that regard, persons of ordinary skill in the art would recognize that the originally filed application (pp. 4-10) describes (1) a plug that fills and closes a hole on insertion of the plug in the

hole; (2) a plug that has an air-tight end face;² (3) a plug that on insertion occupies precisely the entire surface of the hole; and (4) a plug and hole that in use forms a supplementary vent for venting a mold cavity.

The enablement requirement

The test for enablement is whether one skilled in the art could make and use the claimed invention from the disclosure coupled with information known in the art without undue experimentation. See United States v. Telectronics, Inc., 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988), cert. denied, 109 S.Ct. 1954 (1989); In re Stephens, 529 F.2d 1343, 1345, 188 USPQ 659, 661 (CCPA 1976).

We agree with the appellants' argument (brief, pp. 7-11; reply brief, pp. 1-2) that the appellants' disclosure, considering the level of ordinary skill in the art as of the date of the appellants' application, would have enabled a

² Consistent with the specification, one skilled in the art would interpret "air-tight end face" as meaning that the end face is air-tight when the plug is inserted into the hole.

person of such skill to make and use the appellants' invention without undue experimentation. This is especially true in view of the declaration of Antoine Paturle (Paper No. 6, filed May 28, 1996) submitted to establish the operability of the claimed invention. Moreover, as correctly pointed out by the appellants (brief, p. 11), it is well settled that an inventor need not understand the scientific theory of how the invention works as long as it works.

The anticipation rejection

We sustain the rejection of claims 7-9 under 35 U.S.C. § 102(b).

To support a rejection of a claim under 35 U.S.C. § 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Claim 7

Claim 7 reads as follows:

A mold venting plug in the form of an elongated rod, comprising a side surface between two ends, a molding surface at one end, at least one groove formed in the side surface, each such groove extending from the end opposite the molding surface to a point spaced apart from the molding surface, the side surface at said one surface being without grooves, and complementary to the surrounding surface defining the hole.³

Cain discloses a mold vent plug. Figure 1 of Cain shows a fragment of a mold 10 for molding a tire at the molding surface 12 having a bore 14 therein with a counterbore 16 at the molding surface 12 thereof. A gap 18 is formed between the counterbore 16 and a vent plug 20 inserted in the bore 14 of the mold. As illustrated in Figure 2, the plug 20 has an axis hole 22 plugged at the molding surface end of the plug 20. The hole 22 ends in the head portion 24 of the vent plug 20 which has an enlarged diameter head for press fitting into a straight bore in the mold. The straight bore 14 in the mold is counterbored as at 16 to form the gap 18 between the mold

³ There is no proper antecedent basis in claim 7 for either "the surrounding surface" or "the hole."

10 and the plug 20. The gap 18 allows airflow therethrough to a groove 26 in the form of an annulus which communicates with a cross vent hole 28 which in turn permits the air to flow to the vent hole 22 and out through the bore 14 in the mold.

Cain teaches that the gap between the vent plug and the counterbore should be between the maximum gap allowable to exclude the compound of the article being molded from entering the gap, and the minimum gap allowable to permit the required air flow to vent the mold. Cain further discloses in Figures 1 and 2, that the plug 20 includes a lower portion 32 chamfered at a 45° angle to meet the outer diameter of the body 30 to assure clearance for seating of a peripheral face 34 in a lower counterbore 36 in the mold 10.

Figures 3 and 3A of Cain disclose an alternative embodiment of the vent plug (i.e., vent plug 40). In the embodiment of Figures 3 and 3A, the vent plug 20 has been modified by replacing cross vent hole 28 and axis hole 22 with a plurality of grooves 42 formed in the body 30 of the vent plug.

Cain teaches (column 5, lines 36-44) that the vent plugs can be made of stainless steel or machine steel but that other materials could be used for the vent plugs where the materials were suitable to the alternate mold and/or product being molded. Cain also teaches (column 5, lines 45-54) that the vent plug 20 is generally inserted into the bore 14 of the mold 10 so that the plug head 24 is generally flush with the molding surface 12 and that while the plug head 24 of Figure 2 has a face 38 on the top thereof which is flat, it can be appreciated that where the mold is contoured the face 38 can be contoured to match that of the mold 10.

In our view, claim 7 is anticipated by Cain since claim 7 reads on⁴ Cain. In that regard, claim 7 reads on Cain as follows: A mold venting plug in the form of an elongated rod (Cain's vent plug 40 shown in Figures 3 and 3A), comprising a side surface between two ends (the side surface of Cain's vent

⁴ The law of anticipation does not require that the reference teach what the appellants are claiming, but only that the claims on appeal "read on" something disclosed in the reference (see Kalman v. Kimberly-Clark Corp., id.).

plug 40), a molding surface (Cain's face 38) at one end, at least one groove (Cain's grooves 42) formed in the side surface, each such groove extending from the end opposite the molding surface to a point spaced apart from the molding surface (as shown in Figures 3 and 3A Cain's grooves 42 extend from the end opposite face 38 to a point spaced apart from face 38), the side surface at said one surface being without grooves (Cain's side surface on head portion 24 is without grooves), and complementary to the surrounding surface defining the hole (Cain's head portion 24 is complementary to counterbore 16).

The appellants argue (brief, pp. 17-18; reply brief, pp. 3-6) that Cain does not anticipate claim 7. They point out that since Cain includes a gap 18 formed between the counterbore 16 and the vent plug 20 Cain's vent plug 20 would not be "complementary to the surrounding surface defining the hole."

We do not agree.

In proceedings before it, the United States Patent and Trademark Office (USPTO) applies to the verbiage of the claims before it the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the appellants' specification. In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). See also In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983). Moreover, limitations are not to be read into the claims from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) citing In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). In this case, the appellants' specification does not provide any specific definition for the term "complementary" as used in claim 7. The dictionary definition of "complementary" is set forth on page 17 of the brief. In view of that definition, it is our determination that the broadest reasonable meaning of "complementary" which is consistent with the appellants' specification without reading limitations into the claim is

that the plug and hole cooperate together to form a vent. Since clearly Cain's plug and hole cooperate together to form a vent, the claimed limitation in question (i.e., complementary to the surrounding surface defining the hole) is readable on Cain's head portion 24 which is complementary to counterbore 16.

For the reasons set forth above, the decision of the examiner to reject claim 7 under 35 U.S.C. § 102(b) is affirmed.

Claim 8

The appellants have grouped claims 7 and 8 as standing or falling together.⁵ Thereby, in accordance with 37 CFR § 1.192(c)(7), claim 8 falls with claim 7. Thus, it follows that the decision of the examiner to reject claim 8 under 35 U.S.C. § 102(b) is also affirmed.

⁵ See page 6 of the appellants' brief.

Claim 9

The appellants argue (brief, p. 18) that there is no disclosure in Cain that the mold venting plug of Figures 3 and 3A could have a frustroconical body as set forth in claim 9. We do not agree. In that regard, the frustroconical body as set forth in claim 9 reads on the portion 32 of the plug 40 which is chamfered at a 45° angle.

For the reasons set forth above, the decision of the examiner to reject claim 9 under 35 U.S.C. § 102(b) is affirmed.

The obviousness rejection of claim 12

We sustain the rejection of claim 12 under 35 U.S.C. § 103.

A 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 12 adds to parent claim 7 the further limitation that the plug is made of plastic material.

The examiner ascertained (answer, p. 5) that the only difference was the limitation that the plug is made of plastic material. Then, with regard to this difference, the examiner determined that (1) plastic material is a notoriously well known material of construction, and (2) it would have been obvious to a skilled artisan to have utilized plastic material

for constructing the vent plug of Cain for ease of manufacture and for the benefit of low cost.

The appellants argue (brief, p. 18; reply brief, pp. 4-5) that there is no disclosure or suggestion in Cain that the mold venting plug of Figures 3 and 3A could be made of plastic as set forth in claim 12. We do not agree. In that regard, Cain specifically teaches that the vent plug can be made of materials other than stainless steel and machine steel. Thus, it is our view that one skilled in the art would have been motivated to use another known material, such as plastic, for the vent plug of Cain. Under similar circumstances, it has been determined that the mere substitution of glass for wood would not support the patentability of a display case. Substitution of materials will not, in and of itself, create patentability if the same purpose or function could be achieved through the old materials. This applies even if the substituted material is more satisfactory, cheaper, or more durable. Substitution of materials to be patentable must bring about a new mode of construction, or new properties or uses of the article that were not obvious and, in effect, make

the old material obsolete. See Lyle/Carlstrom Associates Inc. v. Manhattan Store Interiors, Inc., 635 F. Supp. 1371, 1385, 230 USPQ 278, 288 (E.D.N.Y. 1986) (citations omitted), aff'd mem., 824 F.2d 977 (Fed. Cir. 1987); accord Graham v. John Deere Co., 383 U.S. 1, 11, 148 USPQ 459, 464 (1966).

For the reasons set forth above, the decision of the examiner to reject claim 12 under 35 U.S.C. § 103 is affirmed.

The obviousness rejection of claims 1, 3, 4 and 11

We will not sustain the rejection of claims 1, 3, 4 and 11 under 35 U.S.C. § 103.

We have reviewed the prior art applied by the examiner in the rejection of claims 1, 3, 4 and 11. However, even if the prior art were modified in the manner set forth by the examiner (answer, pp. 5-6) it would not have arrived at the claimed invention. In that regard, the modified device of Cain would still include gap 18 and therefore would not be readable on claim 1 which requires the plug to have an "air-tight end face" as set forth in claim 1.

For the reasons set forth above, the decision of the examiner to reject claim 1, and claims 3, 4 and 11 dependent thereon, under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 3, 4 and 11 under 35 U.S.C. § 112, first paragraph, is reversed; the decision of the examiner to reject claims 7-9 under 35 U.S.C. § 102(b) is affirmed; the decision of the examiner to reject claim 12 under 35 U.S.C. § 103 is affirmed; and the decision of the examiner to reject claims 1, 3, 4 and 11 under 35 U.S.C. § 103 is reversed.

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

IAN A. CALVERT)	
Administrative Patent Judge)	
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IRWIN CHARLES COHEN)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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