The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 44

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte HELMUT LAUFER,
WOLFGANG FEHLMANN,
JOHANNES PFLUG,
HANS-PETER BAUER,
WOLFGANG BRAUN,
EWALD EBLEN,
PETER NORDHAUS,
and
PETER ZWEIGLE

_____

Appeal No. 2002-0035
Application No. 08/861,918

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ON BRIEF

_____

Before ABRAMS, STAAB, and MCQUADE, *Administrative Patent Judges.*

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants originally took this appeal from the final rejection (Paper No. 23) of claims 28-30, 32-40 and 42-46, all the claims then pending in the application. Subsequently, the examiner reopened prosecution (see Paper No. 39) for the purpose

of entering a new rejection against these claims, whereupon appellants appealed from that rejection. Upon further review (see page 2 of the answer), the examiner has withdrawn the rejection of claims 28-30, 33-40[1] and 46. Thus, the appeal now is directed only to claims 42-45.

Appellants' invention pertains to a conductor (claims 42 and 44) for providing a lead-through connection to the interior of a sealed housing, and the combination of a sealed housing and a conductor (claims 43 and 45) providing a lead-through connection to the housing's interior. A copy of appealed claims 42-45 is appended to appellants' brief.

The single reference relied upon by the examiner in support of the rejections maintained on appeal is:

Porter et al. (Porter)	4,805,420	Feb. 21, 1989

[1]In Paper No. 39, the examiner rejected claim 32 under 35 U.S.C. § 112, second paragraph, as being indefinite in that it depended from canceled claim 31, and suggested that claim 32 be canceled. In the brief (Paper No. 42), appellants stated on page 8 that they agreed with this proposal; however, they did not formally cancel claim 32. In light of appellants' statement on page 8 of the brief regarding their agreement with the examiner that claim 32 should be canceled, the appeal as to claim 32 is dismissed. A formal amendment canceling claim 32 should be tendered upon return of this application to the Technology Center.

Claims 44 and 45 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Porter.

Claims 42 and 43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Porter.

DISCUSSION

I. The 35 U.S.C. § 102(b) rejection of claims 44 and 45

Porter pertains to a cryogenic vessel for cooling electronic components such as integrated circuits. As explained by Porter at col. 2, lines 31-67, with reference to Figures 1 and 2,

> the cryogenic vessel **10** is made up of two insulated vessel portions **14** and **16** which may be symmetrical and which are separated by a flexible membrane **18** located between a pair of seals **19.** The flexible membrane **18** has an integrated circuit (IC) socket **20** located near one end such that an IC chip **22** connected to the IC socket **20** is located within one of the immersion chambers **12** . . . .
>
> . . . Each symmetrical portion **14** and **16** includes an outer wall **32** and an inner wall **34.** Next to the outer wall **32** is a layer of insulating material **36** such as a closed cell plastic foam which provides mechanical strength to the outer wall **32** and is sized to allow for a tight vapor seal between the symmetrical vessel portions **14** and **16** and the flexible membrane **18** trapped therebetween when the vessel portions **14** and **16** are clamped together by the bolts **24.** A vacuum chamber **30** is defined by the inner wall **34** and a chamber wall **33** next to the insulating layer **36.** Each vacuum chamber **30** is shaped to form an enclosure and is welded shut. The vacuum chamber **30** forms a layer of super insulation around the immersion chamber **12** of each vessel portion **14** and **16.** The insulation layers **36** of the vessel

> portions **14** and **16**, together with the flexible membrane **18** between the seals **19**, seal the immersion chambers **12** from the ambient environment external of the sealed cryogenic vessel **10**, thereby containing a cryogenic liquid **42** in the immersion chambers **12** and preventing frost formation.
>
> The flexible membrane **18** may be a commercially available flex-circuit made of material which does not become rigid at cryogenic temperatures such as, for instance, a polyimide or Teflon material.

Anticipation is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every 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). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations of the claim be found in or fully met by the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), *cert. denied*, 465 U.S. 1026 (1984).

Appellants contend (supplemental brief, page 11) that Porter

> does not teach the new features of [the] present invention which are now defined in claims 44 and 45 but instead teaches a structure which is different, operates in a different manner, and does not have a conductor track formed as a bendable carrier film which

> provides a connection to a movable electrical component. The features of these claims are not disclosed in the patent to Porter and can not be derived [therefrom] . . . .

The examiner responds (answer, page 5) that Porter discloses all of the claimed features of claims 44 and 45, specifically, housing 16, closing part 14, flexible film carrier 18 having conductor tracks 25, and seals 19 on either side of the flexible carrier film. The examiner also points out that claims 44 and 45 do not include any recitation of the carrier film being connected to a movable component.

Appellants have not specifically pointed out, and it is not apparent to us, precisely what *claimed* features of appellants' invention Porter lacks. In this regard, we note, as did the examiner, that claims 44 and 45 do *not* recite the carrier film as being connected to a movable electrical component. Based on appellants' vague argument that Porter lacks certain unspecified "new features" of the invention, and the examiner's well reasoned position that Porter discloses all claimed features of claims 44 and 45, we shall sustain the standing rejection of claims 44 and 45 as being anticipated by Porter.

II. The 35 U.S.C. § 103(a) rejection of claims 42 and 43

Claim 42 depends from claim 44 and adds that the seals on either side of the flexible carrier film are fixed thereto by vulcanizing to the carrier. Claim 43 contains similar language.

In rejecting these claims as being unpatentable over Porter, the examiner concedes that Porter does not disclose this claim feature. The examiner takes the position, however, that

> in *Howard v. Detroit Stove Works,* 150 U.S. 164 (1893), it was determined that to form in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. On that basis, one of ordinary skill in the art would have found it obvious to have formed the conductor track carrier and the seals [of Porter] as an integral unit. Further, one of ordinary skill in the art would have readily realized that perhaps the best way to integrally form the seals with the conductor track carrier is to vulcanize the seals directly thereto, as is conventional and well known in the seal art. [Answer, pages 5-6.]

Rejections based on 35 U.S.C. § 103 must rest on a factual basis. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 177-78 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). 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. *Id.*

In the present case, the examiner has failed to advance any factual basis to support the conclusion that it would have been obvious to one of ordinary skill in the art to modify the carrier film 18 of Porter in the manner proposed. The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification (*see In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). Porter contains no such suggestion.

Concerning the examiner's citation of *Howard v. Detroit Stove Works* in support of the rejection, we note that the examiner incorrectly drew from this case turning on specific facts, a general obviousness rule: namely, that forming several pieces integrally as a single-piece is not considered to be patentable subject matter. No such *per se* rule exists.[2] The examiner's citation of case law as a basis for rejecting claims

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[2]We direct the examiner's attention to *In re Ochiai,* 71 F.3d 1565, 1570, 37 USPQ2d 1127, 1132 (Fed. Cir. 1995) and *In re Brouwer,* 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1996) wherein the Federal Circuit has held that the claimed invention as a whole must be evaluated under the standards set down in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 466 (1966), and its progeny, and that the use of *per se* rules is improper in applying the test for obviousness under 35 U.S.C. § 103 since such rules are inconsistent with the fact-specific analysis of claims and prior art mandated by § 103.

that differ from the prior art by reciting a single-piece vulcanized construction is improper if, as here, it sidesteps the fact-intensive inquiry mandated by 35 U.S.C. § 103. In the present case, one must determine if it would have been obvious to one of ordinary skill in the art at the time the invention was made to make Porter's seal and carrier film as a single vulcanized piece. Based on the evidence cited by the examiner (i.e., the Porter reference), we cannot accept the examiner's bottom line conclusion that the differences between the subject matter recited in claims 42 and 43 and Porter are such that the claimed subject matter as a whole would have been obvious at the time the invention was made to a person of ordinary skill in the art.

Accordingly, we shall not sustain the standing 35 U.S.C. § 103(a) rejection of claims 42 and 43 as being unpatentable over Porter.

CONCLUSION

The rejection of claims 44 and 45 as being anticipated by Porter is affirmed.

The rejection of claims 42 and 43 as being unpatentable over Porter is reversed.

The decision of the examiner twice rejecting claims 42-45 is affirmed-in-part.

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

NEAL E. ABRAMS Administrative Patent Judge	)	
LAWRENCE J. STAAB Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOHN P. MCQUADE Administrative Patent Judge	)	

LJS:hh

STRIKER, STRIKER & STENBY
103 EAST NECK ROAD
HUNTINGTON, NY 11743