The opinion in support of the decision being entered today is not binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte ROBERT C. DART, RYAN P. GINGERAS and TOOD ATKINS

Appeal 2007-1325
Application 10/065,722
Technology Center 3781

Decided: August 22, 2007


FISCHETTI, Administrative Patent Judge.

DECISION ON APPEAL

A. Statement of the case

Appellants Robert C. Dart, Ryan P. Gingras and Todd Atkins (hereafter "Dart") seek review under 35 U.S.C. § 134(a) of a rejection of claims 3, 9-11, 27-29, 36-39, 44-50, 55-59, 63, 68-71, 75-77, 80-83, and 88-95. There are other claims in the application. Some claims are objected to as depending from rejected claims. Other claims have been allowed. The
status of all pending claims as of the date of the Examiner's Answer is
identified in Appendix 1.

We have jurisdiction under 35 U.S.C. § 6(b). While the rejection on
appeal is not a final rejection, Dart's claims have been twice rejected within
the meaning of 35 U.S.C. § 134.

The application on appeal was filed on 13 November 2002 and was
The four-digit paragraph numbers of the Specification as filed do not
coincide with the four-digit paragraph number of the application as
published. Since the Appeal Brief refers to the four-digit paragraph numbers
of the specification, as filed, we will do likewise.

Dart claims benefit of an earlier filing date based on (1) Provisional
Application 60/350,706, filed 13 November 2001, (2) Provisional
Application 60/350,875, filed 22 January 2002 and (3) Provisional
Application 60/410,380, filed 13 September 2002.

The real party in interest is Dart Container Corporation. Appeal
Brief 1.

The Examiner rejected claims 3, 9-11, 27-29, 36-40, 44-50, 55-59, 63,
68-71, 75-77, 80-83, and 88-95 under 35 U.S.C. § 103(a) as being
unpatentable over Freek and Waterbury. (The reader should know that no
references to et al. are made in this opinion.)

The Examiner has also rejected claims 49-59 under 35 U.S.C. § 112,
second paragraph, as being indefinite.
The following prior art was relied upon by the Examiner.

<table>
<thead>
<tr>
<th>Name</th>
<th>Patent Number</th>
<th>Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterbury</td>
<td>US 4,232,797</td>
<td>Nov. 11, 1980</td>
</tr>
<tr>
<td>Freek</td>
<td>US 5,996,837</td>
<td>Dec. 07, 1999</td>
</tr>
</tbody>
</table>

In addition to the prior art cited by the Examiner, we also refer to the following additional prior art.

<table>
<thead>
<tr>
<th>Name</th>
<th>Patent Number</th>
<th>Issue Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeMars</td>
<td>US 4,899,902</td>
<td>Feb. 13, 1990</td>
</tr>
<tr>
<td>Mueller</td>
<td>US 5,415,312</td>
<td>May 16, 1995</td>
</tr>
<tr>
<td>Lane</td>
<td>US 5,490,609</td>
<td>Feb. 13, 1996</td>
</tr>
<tr>
<td>Aichert</td>
<td>FR 2 736 620</td>
<td>Jan. 17, 1997</td>
</tr>
</tbody>
</table>

All prior art cited above is prior art under 35 U.S.C. § 102(b).

**B. Record on appeal**

In deciding this appeal, we have considered only the following documents:

1. Specification, including original claims.
2. Drawings.
3. Office Action entered 26 January 2006
6. The Examiner's Answer entered 26 October 2006.
7. Freek.
8. Waterbury.
C. Issues

A first issue on appeal is whether Dart has sustained its burden of showing that the Examiner erred in rejecting the rejected claims on appeal as being unpatentable under 35 U.S.C. § 103(a) over the prior art. According to Dart, the first issue turns on (1) whether Freek and Waterbury are "analogous art," (2) if so, whether there is a teaching, suggestion or motivation to combine Freek and Waterbury, and (3) if so, whether the combination of Freek and Waterbury "teaches" the claimed invention.

What is not an issue in the appeal is whether the claimed invention has been a commercial success. Dart has presented no evidence of commercial success and accordingly has waived its opportunity to have commercial success considered on appeal.

A second issue on appeal is whether the subject matter of claim 84 and claims which depend from claim 84 are unpatentable under 35 U.S.C. § 112, second paragraph, as being indefinite. 37 C.F.R. § 41.50(b) (2006).
What is not an issue on appeal is whether the Examiner erred in rejecting claims 49-59 as being unpatentable under 35 U.S.C. § 112, second paragraph, for failure to particularly point out and distinctly claim the invention.

In the Appeal Brief, Dart says that it is "not appealing this rejection in this proceeding." (Appeal Brief 4 n.2).

However, in the Notice of Appeal, Dart says that it appeals from the last decision of the Examiner.

Contrary to Dart's assertion that it is not appealing the § 112 rejection, Dart has appealed the rejection, but has abandoned the appeal as to the rejection.

Accordingly, the appeal will be dismissed as to claims 49-59 and therefore there is no further need to address or consider the Examiner's § 112, second paragraph, on the merits.

D. Findings of fact

The following findings of fact are believed to be supported by a preponderance of the evidence. To the extent that a finding of fact is a conclusion of law, it may be treated as such. Additional findings as necessary may appear in the discussion portion of the opinion.

The invention

The invention can be understood by references to Figs. 1, 2 and 6, and independent claims 83-84 and 88-89.
Dart Fig. 1—Dart lid with cap in closed position
Dart Fig. 2—Dart lid with cap in open position
Dart Fig. 6A—Lid with cap in closed position and showing chamber

Claims 83-84 and 88-89

Claims 83-84 and 88-89 are representative of the claimed invention

[Some indentation, drawing element numbers and footnote material added].

Claim 83

A disposable, recloseable¹ lid [Figs. 1-2 10] comprising:

a dome-shaped cap [Figs. 1-2 12] sized to overlie and

substantially cover the open top of a cup [not shown], the cap 12

comprising

a mounting recess [Fig. 2 46],

an upper surface [Fig. 2 40],

¹ In the claims, as reproduced in the Claims Appendix of the Appeal Brief, Dart uses the term "reclosable". The specification uses the term "recloseable." See, e.g., Specification 1 ¶ 0001. We have reproduced the claims using the term found in the Specification.
a side wall [Fig. 2 112] at least partially encircling the upper surface [Fig. 2 40] and terminating in a top wall [Fig. 2 114], and a drink opening [Fig. 2 96] located in the top wall [Fig. 2 114]; a mounting ring [Figs. 1-2 20] connected to the cap [Figs. 1-2 12] for mounting the cap to a cup; and a tab closure [Fig. 2 14] comprising a mounting plug [Fig. 2 50] and a drink plug [Fig. 2 54] connected by a strap [Fig. 2 52], the mounting plug [Fig. 2 50] sized to be received within the mounting recess [Fig. 2 46], and the drink plug [Fig. 2 54] sized to be received within the drink opening [Fig. 2 54] wherein the user can open and close the lid by removing or inserting the drink plug from the drink opening.

Claim 84

A disposable, recloseable lid [Figs. 1-2 10] comprising:

a dome-shaped cap [Figs. 1-2 12] sized to overlie and substantially cover the open top of a cup [not shown], the cap 12 comprising

an upper surface [Fig. 2 40],
a drink opening [Fig. 2 96], and

a mounting recess [Fig. 2 46] formed therein;

2 In the Specification, element 96 is referred to as "[t]he dispensing aperture." Specification 9 ¶0049.
a mounting ring [Fig. 1 20] connected to the cap 12 below the upper surface 40 and for mounting the cap 12 to a cup [not shown]; and

a tab closure [Fig. 2 40] comprising

a mounting plug [Fig. 2 50] and

a drink plug [Fig. 2 54] connected by a strap [Fig. 2 52], the mounting plug [Fig. 2 50] sized to be received within the mounting recess [Fig. 2 46], and the drink plug [Fig. 2 54] sized to be received within the drink opening [Fig. 2 96] where the user can open and close the lid by removing or inserting the drink plug from the drink opening; wherein the mounting recess [Fig. 2 46] has a bottom wall [Fig. 2 64] and the mounting plug has a bottom wall [Fig. 2 130], which is spaced above the mounting recess bottom wall [Fig. 2 64] when the mounting plug is received within the mounting recess [Fig. 2 46] to define a chamber [Fig. 6A area between mounting plug bottom wall 130 and mounting recess bottom wall 46] therebetween.

Claim 88

A disposable, recloseable lid [Figs. 1-2 10] comprising:

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Insofar as we can tell, the claim language "to define a chamber therebetween" has no direct antecedent basis in the descriptive portion of the specification. However, see original claim 40. According to Dart, the quoted limitation is supported in the specification at page 9, ¶ 0053, lines 8-10 and Figure 6 [sic—Figure 6A]. Appeal Brief 3. Later in the opinion we reject claim 84 as being indefinite.
a dome-shaped cap [Figs. 1-2 12] sized to overlie and substantially cover the open top of a cup [not shown], the cap [Figs. 1-2 10] comprising an upper surface [Fig. 2 40], a drink opening [Fig. 2 96], and a mounting recess [Fig. 2 46] formed therein; a mounting ring [Figs. 1-2 20] connected to the cap [Figs. 1-2 12] below the upper surface [Fig. 2 40] and for mounting the cap [Figs. 1-2 12] to a cup [not shown]; and a tab closure [Fig. 2 14] comprising a mounting plug [Fig. 2 50] and a drink plug [Fig. 2 54] connected by a strap [Fig. 2 52], the mounting plug [Fig. 2 50] sized to be received within the mounting recess [Fig. 2 46], and the drink plug [Fig. 2 54] sized to be received within the drink opening [Fig. 2 96] wherein the user can open and close the lid by removing or inserting the drink plug [Fig. 2 54] from the drink opening [Fig. 2 96] wherein the mounting recess [Fig. 2 46] and mounting plug [Fig. 2 50] each comprise an inset portion, and the strap [Fig. 2 52] connects to the inset portion of the mounting plug.

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4 Insofar as we can tell, the language "inset portion" does not appear in the descriptive portion of the specification. However, see original claims 44 and 75. Likewise, Dart does not identify any drawing element number or portion of the Specification in discussing "inset portion" on page 3, last line of the Appeal Brief.
A disposable, recloseable lid [Figs. 1-2 10] comprising:

- a cap [Figs. 1-2 12] sized to overlie and substantially cover the open top [not shown] of a cup [not shown], the cap [Figs. 1-2 12] comprising a mounting recess [Fig. 2 46] and a drink opening [Fig. 2 96];
- a mounting ring [Figs. 1-2 20] connected to the cap [Figs. 1-2 12] for mounting the cap to a cup;
- a tab closure [Fig. 2 14] comprising
  - a mounting plug [Fig. 2 50] and a drink plug [Fig. 2 54] connected by a strap Fig. 2 52], the mounting plug [Fig. 2 50] is sized to be received within the mounting recess [Fig. 2 46] to mount the tap closure [Fig. 2 14] to the cap Figs. 1-2 12], and the drink plug [Fig. 2 54] is sized to be received within the drink opening [Fig. 2 96];
  - a drink plug holder [Fig. 2 48] for holding the drink plug [Fig. 2 54] in a stored position when the lid is in the open position;
- and
- the cap [Fig. 2 12] and tab closure [Fig. 2 14] are thermoformed from a common plastic sheet\(^5\) wherein an easy to assemble recloseable

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\(^5\) The phrase "plastic sheet" appears in the specification. Specification 4 ¶ 0012. In so far as we can tell, the phrase "common plastic sheet" does not appear in the specification. However, the phrase "same plastic sheet" appears in original claim 2. We assume that "same" and "common" mean the same thing. However, in context both "same" and "common" have at least two meanings: (1) the cap and tab closure are made from a single sheet of plastic or (2) the cap and tab closure are made from the same plastic, but
l [Figs. 1-2] is provided wherein the user can open and close the lid by removing or inserting the drink plug [Fig. 2] from the drink opening [Fig. 2] while the tab closure remains mounted to the cap.

Prior art

Freek

With reference to Fig. 1, Freek describes a lid [Fig. 1] with drink opening that is designed to be mounted to a cup [not shown in Fig. 1, but see Fig. 5]. col. 3:39-40.

possibly different sheets of the same plastic. Our concern is not relevant to resolution of the § 103 issues on appeal since plastic caps have long been made by thermoforming plastics sheets and it would not make any difference whether a cap and a tab are made from the same sheet or from different sheets of the same plastic. Nevertheless, Dart may wish to clarify the meaning of its claim should it elect to further prosecution of the application.
2. The lid **10** can be made by thermoforming a plastic sheet material. col. 1:65 through col. 2:3 and col. 6:53-56.

3. Drink opening **20** as illustrated in Fig. 1 is merely an opening in lid **10**. The drink opening may include a cover or plug [not shown] which may be readily removed by the consumer prior to consumption of the contents of the cup. col. 3:61-65.

4. The use of plugs in plastic lid openings was known long prior to Freek. *See, e.g.*, DeMars, Figs. 1-2.

5. Lid **10** has a top surface **44** having what Freek describes as a conical configuration. col. 5:12-15.

6. Mounting ring **34** forming part of the lid below the top surface is used to mount the lid to a cup. col. 4:12-19.

7. As noted by the Examiner, the principal difference between Freek and the claimed subject matter is that Freek "is silent regarding the specifics of the plug" which optionally may be used with the Freek lid. Examiner's Answer 4, third full paragraph.
Waterbury Fig. 4—Waterbury top of can showing lid in closed position
8. With reference to Figs. 4, 6 and 7, Waterbury describes an easy-to-open closure (tab) for containers, for example, sealed containers for food and beverages. col. 1:7-13.
9. Waterbury describes a tab closure comprising a closure element 15' and mounting element 14' connected by a hinge [Fig. 6 16]. col. 2:65 through col. 3:3 and col. 4:10-15.

10. The embodiment shown in Fig. 6 has a recess 22a of substantially the same shape and depth as the out configuration and thickness of mounting element 14. col. 4:3-6.

11. When the free end of closure element 15 is in a folded back condition (see Fig. 2 not reproduced), a user may drink directly from the container without having to discard the closure. col. 3:20-25.

French Patent Application 2,736,620 (hereinafter referred to as “Aichert”)

Aichert Fig. 1—Aichert cup lid with pivoted cover section
12. With reference to an English language abstract in the record and Fig. 1, Aichert describes a cover 4 for use on the top of a can.

13. The lid has a pouring orifice 5 which can be sealed closed by a pivoted cover section 10.

14. Pivoted cover section 10 is secured to cover 4 via catch [détente] 7.

15. Détente 7 is secured to cover 4 via a recess [not numbered].

Mueller

**FIG. 15**

Mueller Figs. 15 & 16—Mueller stopper

16. With references to Figs. 15-16, Muller describes a stopper with two circular walls 106, 122 which serve as a means to seal openings in the
top of a plastic cup used for cold beverages. col. 1:10 and 15-16; col. 7:65 through col. 8:47.

17. The stopper has the same configuration as Dart's tab closure.

DeMars

DeMars Figs. 1-2—DeMars cup lid with resealable drink opening
18. With reference to Figs. 1-2, DeMars describes a lid 10 for a container 12 having a drinking spout 22 and a cover 28 adapted to fit over the spout in a friction-fit relationship to prevent spills. col. 2:45-47, col. 2:67, and col. 3:11-20.

19. With reference to Fig. 1, Lane describes a cup lid 10 having a peel-back opening 48. col. 2:37 and col. 3:7.
20. The peel-back opening has knob 70 which can be pressed into recess 72 when the opening is in the open position. col. 3:40-49 and col. 4:1-5 (describing Fig. 3 not reproduced in this opinion).

21. The Examiner found securing a plug within a recess in a lid to be within the level of ordinary skill in the art and other art e.g., Aichert, describes disposable lids of various configurations having closure plugs for removably closing a drink opening. (Office Action dated January 26, 2006, pp. 4, 5).

**Level of skill in the art**

What one skilled in the art learns from the prior art, taken individually and as a whole, is that Dart has used known elements in the cup lid art for their intended purpose all the while achieving an expected result.

One skilled in the art would have known that a "plug" may be inserted into a "recess" to hold the plug into a fixed (but releasable) position.

One skilled in the art would have known that a plastic lid could be used on plastic and "styrofoam" cups of the kind commonly found in coffee shops and fast food restaurants.

One skilled in the art would have known how to make a cup lid with a drink opening which could be sealed and re-sealed through multiple cycles.

One skilled in the art would have known that there are various options for combining the known elements shown in the prior art depending on a particularized need.

One skilled in the art would know that plastic lids could be formed using a thermoforming process.
E. Principles of law

A claimed invention is not patentable if the subject matter of the claimed invention would have been obvious to a person having ordinary skill in the art. 35 U.S.C. § 103(a); KSR Int’l Co. v. Telesflex Inc., 127 S. Ct. 1727, 82 USPQ2d 1385 (2007); Graham v. John Deere Co. of Kansas City, 383 U.S. 1 (1966), 148 USPQ 459.

Facts relevant to a determination of obviousness include (1) the scope and content of the prior art, (2) any differences between the claimed invention and the prior art, (3) the level of skill in the art and (4) any relevant objective evidence of obviousness or non-obviousness. KSR, 127 S. Ct. at 1734, 82 USPQ2d at 1389, Graham, 383 U.S. at 17-18.

A person having ordinary skill in the art uses known elements and process steps for their intended purpose. Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57 (1969) (radiant-heat burner used for its intended purpose in combination with a spreader and a tamper and screed); Sakraida v. AG Pro, Inc., 425 U.S. 273, 282 (1976) (the involved patent simply arranges old elements with each performing the same function it had been known to perform); Dunbar v. Myers, 4 Otto (94 U.S.) 187, 195 (1876) (ordinary mechanics know how to use bolts, rivets and screws and it is obvious that any one knowing how to use such devices would know how to arranged a deflecting plate at one side of a circular saw which had such a device properly arranged on the other side).

When multiple prior art references are used to reject a claim, then the prior art references should be "analogous." Prior art is "analogous" when a person having ordinary skill in the art would consider it relevant or related to
the invention sought to be patented. *Dann v. Johnston*, 425 U.S. 219, 229 (1976) (data processing system used in large business organization found to analogous to inventor's data process system used in banking industry); *Graham v. John Deere Co.*, 383 U.S. 1, 35 (1966) (where inventor was attempting to solve mechanical closure problem, liquid containers having pouring spouts found to be analogous to an inventor's pump spray insecticide bottle cap); *Cuno Engineering Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 91-92 (1941) (thermostat to break circuit in a electric heater, toaster or iron found to be analogous to a circuit breaker used in an inventor's cordless cigar lighter); *Mast, Foos & Co. v. Stover Mfg. Co.*, 177 U.S. 485, 493 (1900) (device used in mills other than windmills held to be analogous to inventor's use of same device in windmills); *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992) (if art is in the field of applicant's endeavor or is reasonably pertinent to the particular problem with which an inventor is concerned, then the art is "analogous").

**F. Analysis**

**Examiner's § 103 rejection**

The Examiner rejected the claims holding that a person having ordinary skill in the art would have found it obvious to use the closure tab of Waterbury in the cap of Freek.

The Examiner found that securing a plug within a recess in a lid to be within the level of ordinary skill in the art and that other prior art references, *e.g.*, Aichert, describe disposable lids of various configurations having closure plugs for removably closing a drink opening. (FF. 21)
On that basis, the Examiner found that one skilled in the art would have known to use the closure tab in Waterbury as part of the lid in Freek. While we accept the Examiner’s use of Waterbury as describing the sole known use of closure tabs on lids, we prefer to make our case for obviousness under 35 U.S.C. § 103(a) using plural teachings of prior art tab closures as found, e.g., in (1) Mueller, (2) Aichert, (3) De Mars and (4) Lane. The criteria for combining references is not the number of references, “but what they would have meant to a person of ordinary skill in the field of the invention.” In re Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

We will affirm the Examiner’s rejection of claims 3, 9-11, 27-29, 36-39, 44-50, 55-59, 63, 65-70, 75-77, 80-83, and 88-95 under 35 U.S.C. § 103(a), but use additional prior art to support our holding of obviousness. Thus our affirmance is of the Examiner’s rejection under 35 U.S.C. § 103(a) based on the combined disclosures of Freek, Waterbury, Mueller, Aichert, De Mars and Lane.

1. Scope and Content of the Prior art and Differences

“[P]roof of what was old and in general use at the time of the alleged invention...may be admitted to show what was then old, or to distinguish what is new...” Dunbar v. Myers, 4 Otto (94 U.S.) 187, 199 (1876).

From Waterbury, Mueller and Aichert one skilled in the art knows the scope and content of the prior art includes tab closures individually connectable to a recess in a cap using a mounting plug connected at the
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recess, and each tab closure having a drink plug resealably connected to a
drink opening in the cap.

the only differences between these prior art references and the
invention claimed by dart are: (1) in waterbury, lid 11 is made integrally
with the container 10 rather than being a separate piece, and (2) the lids in
muller and aichert are constructed so as to be reusable and are not
disposable per se, as the claims recite.

however, from de mars and lane one skilled in the art would have
appreciated that at the time of the invention it was known to fabricate a
disposable lid for a foam plastic coffee cup with a drink plug connected to it
using an integrally formed strap. (ff. 18, 19, 20).

from freek one skilled in the art also would have appreciated the fact
that a disposable coffee cup lid made from a thermoformed plastic sheet was
known at the time of the invention and had all the structure recited in claims
83, 88 and 89, except for a tab closure to connect the drink plug to the cap.
(ff. 1-7)

connecting the drink plug to a disposable plastic lid using a strap was
known at the time of the invention as taught by de mars and lane.

thus, the knowledge of a person with ordinary skill in the art included
the know-how of making plug and recess connections, and resealable drink
openings using interlocking plugs (ff. 21) as further evidenced by muller
and aichert, and waterbury.
2. Dart is a Combination of Familiar Elements With a Predicable Result

The combination of two known elements such as, a tab closure and a domed-shaped disposable plastic cap with an opening in it, cannot constitute patentable invention unless each element of the combination performs an “additional or different function in the combination [other] than they perform out of it.” See, e.g., Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 71 S. Ct. 127, 130 (1950). We find no evidence of any such additional or different function in Dart's claimed invention vis-à-vis the prior art tab closures.

a. The Function of Dart’s Tab Closure

The Summary of Invention in Dart describes the function of the tab closure 14 as simply securing one end of the tab to the cap via the mounting plug 50 and releaseably connecting the other end carrying the drink plug 54 to the drink opening 42 such that “the drink plug is sized to be received within the drink opening wherein the user can open and close the lid by removing or inserting the drink plug from the drink opening.” (Specification 4)

Dart's structure and corresponding function are found repeatedly in the prior art.

b. Prior Art Tab Closures Function in the Same Way as Dart

The prior art tab closures of Waterbury, Mueller, and Aichert when used in the lid of Freek do what they always have done in these prior art devices, namely, to hold a drink plug in place through the intermediary of a connecting strip connected to the cap when the plug is in an opened
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condition to allow the drink opening to be resealed with the drink plug after the contents are poured out.

In Waterbury, the tab closure has a mounting plug 14 (referred to as a mounting element) and a drink plug 15 (referred to as a closure element) connected by a hinge portion 16 (referred to as a hinge connection) in the form of a strap (Waterbury, col. 2 ll. 67, 68, col. 3, ll.1). The mounting plug in Waterbury is also inset within a recess 22a formed in the lid 11 of a drink container. Thus, when the free end of closure plug 15' is in a folded back condition, a user may drink directly from the container without having to discard the closure, as done in Dart. (FF. 11).

In Mueller, the tab closure 100 (Fig. 16) has a mounting plug 122 and a drink plug 102 connected by a hinge portion 120 in the form of a strap or strip of material 120. The drink plug 102 has the same configuration as Dart’s drink plug. (FF. 17). The cap 50 includes a recess (see Fig. 12, lead line 12) which is sized to receive the mounting plug 122 therein so that the drink plug 102 remains attached to the lid when the drink plug is in its open condition allowing the contents to be poured out, again in a manner similar to Dart. (Mueller, col. 3, ll. 49-53)

In Aichert, the tab closure 10 (Fig. 16) has a mounting plug 7 and a drink plug 11 connected by a hinge portion 9 in the form of a strap or strip of material. The lid 4 has a pouring orifice 5 which can be sealed closed by a pivoted cover section 10 and opened to allow the contents to be poured out while the closure tab remains attached to the cap 4. (FF. 13) The closure tab

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6 Waterbury describes its “lid is provided with a recess 22a of substantially the same shape and depth as the outer configuration and thickness of the mounting element 14.” (Waterbury, Col. 4, ll. 3-6)
10 is secured to cap 4 via catch détente 7 as the mounting plug 50 in Dart is inset in the mounting recess 46 (FF. 14) to allow the drink opening to be resealed by the attached drink plug.

We find that Dart's lid has no additional or different function vis-à-vis these prior art tabs when used in connection with conventional lids, such as found in Freek or Dart's cap 12.

3. Analogous Art

We consider Waterbury, Mueller, Aichert, De Mars and Lane all to be analogous art because each is reasonably pertinent to the problem with which Dart was concerned. See In re Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed). See KSR, 127 S. Ct. at 1742, 82 USPQ2d 1385 at 1397.

The Dart lid attempts to solve the same problem as the prior art, namely, reclosure of a drink opening once opened. Dart describes the problem to be solved as providing a closure “that can be opened to dispense a beverage and closed to effectively seal the container against spillage” through multiple cycles (Br. 6, 7).

Likewise, each of the closures in Waterbury, Mueller, Aichert, Lane and De Mars provide a hinge or strap portion connected to the lid to allow the closure to be articulated between opened and closed positions over a drink opening thereby dealing and resolving the same problem posed to Dart.
Appellants argue Waterbury is nonanalogous art because it deals with a closure for a soda can and “not a recloseable lid for use on a cup”, and thus deals with a completely different problem. (Br. 6) But, the prior art teaches that a lid, such as described by Dart, may cap a soda can to provide a recloseable feature for the can once opened. More specifically, Aichert discloses a separate recloseable plastic lid 4 used on a soda can (FF. 12-15), further evidencing that liquid containers, such as a cup or a can, share the same reclosure problems.

Appellants further argue, “the problem to be solved by...Waterbury... is having a separate flip-top tab closure which must be discarded after the can has been opened.” (Br. 6) To the contrary, Waterbury discloses the closure as “resealable to store unused contents” (Waterbury col. 1, ll. 35), and furthermore contemplates plural embodiments (Figs. 2,3,7) for maintaining the closure in a “folded back” condition to hold it in a “fully open position while the contents are discharged”. (Waterbury, col. 3, ll. 5-7, 19-23) Thus, Appellants’ assertion of Waterbury being limited to a closure “which must be discarded after the can has been opened” (Br. 6) is believed to be incorrect.
Finally, *Graham* addressed a strikingly similar non-analogous art issue as between two liquid containers each with a different closure device and held the containers to be pertinent to one another. The Court reasoned that the devices were pertinent to each other because both seek to solve the same "mechanical closure problem." *Waterbury, Mueller, Aichert, Lane* and *De Mars* all deal with a mechanical closure in a liquid containers as does *Dart*, and thus must deal with the same mechanical closure problems.

4. The Motivation Argument

Appellants assert the "Examiner has failed to identify any motivation, suggestion, or teaching of the desirability of combining Freek '837 with *Waterbury '797 to arrive at Applicants' invention." (Br. 9) To the extent that *Dart* argues that an *explicit* motivation, suggestion, or teaching in the art, the argument has been foreclosed by *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 82 USPQ2d 1385 (2007). In *KSR*, the Court characterized the teaching, suggestion, motivation test as a "helpful insight" but found that when it is rigidly applied, it is incompatible with the Court's precedents.

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*Graham* involved two patents: (1) the familiar Graham plow patent and (2) a Scroggins dispenser patent. The Scroggins patent is addressed in the *Calmar, Inc. v. Cook Chemical Co.*, and No. 43, *Colgate-Palmolive Co. v. Cook Chemical Co.* part of the Graham opinion and relates to U.S. Patent 2,870,943 directed to a plastic finger sprayer with a 'hold-down' lid used as a built-in dispenser for containers or bottles packaging liquid products, principally household insecticides.

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*As between closure devices for liquid containers, the Court held that these devices are pertinent because, "closure devices in such closely related art as pouring spouts for liquid containers are at the very least pertinent references."* *Graham*, 383 U.S. at 36, 86 S. Ct 684 at 703.
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1. *KSR*, 127 S. Ct. at 1741, 82 USPQ2d at 1396. The holding in *KSR* makes clear that there is no longer, if there ever was, a rigid requirement for finding a reason to combine teachings of the prior art.

4. Helpful insights, however, need not become rigid and mandatory formulas; and when it is so applied, the TSM test is incompatible with our precedents. The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents. *KSR*, 127 S. Ct. at 1741, 82 USPQ2d at 1396.

13. Rather, the application of common sense may control the reasoning to combine prior art teachings. See *Id.* at 1742, 1397.

15. The practice of attaching a strap to an item to prevent it from being lost is familiar to everyone and has long been used in the simplest applications. It is common sense, for example, to attach these items to a holder to keep them from being lost, (1) a surf board to the surfer’s ankle, (2) reading glasses to the neck of the reader, (3) a chuck key to a drill, (4) a fire hydrant hose opening cover to the hydrant, (5) car gas caps to a car, (6) golf club covers one to another, (7) baby pacifiers to a baby's shirts, (8) kids gloves to a winter coat, (9) keys to a belt, etc. Thus, common sense acquired by everyday experience would dictate that the plug\(^9\) or cover to the drink opening disclosed in *Freek* at column 3, lines 63-65, would somehow be attached to the lid through the intermediary of a strap or lanyard in order to prevent the plug from being lost when the contents are not being consumed.

\(^9\) Appellants argue (Br. 10) that the Examiner has mischaracterized the word “plug” from *Freek*. But, *Freek* in column 3, line 63 explicitly states that a “plug” may cover the drink opening. The term “plug” thus speaks for itself.
5. New Grounds of Rejection:

Indefiniteness rejection

Claims 84, and claims 85-87 which depend directly or indirectly from claim 84\(^{10}\), are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Our principal concern with this is Dart's use of the word "chamber" in the claim.

While the word chamber appears in some of the original claims, it is not defined in the specification.

Accordingly, we give the word its ordinary meaning. One meaning of chamber is: a natural or artificial enclosed space or cavity. *Webster’s Collegiate Dictionary Tenth Edition (1996).*

The Waterbury mounting element is described as having substantially the same shape and depth as the recess into which it placed. Thus, the mounting element and recess do not have to have precisely complimentary shapes. Nor has Dart established that a mounting element and recess made by a thermoforming process would be expected to be precisely complimentary. To the extent that there is any opening between the mounting element and the recess in a device made by a third-party, we do not think Dart is entitled to infringement relief against that party based on the broadest reasonable interpretation of "chamber" in claim 84 and an attempt to maneuver the invention of claim 84 to cover devices falling

\(^{10}\) Claims 40-43, 71-74 while not dependent on claim 84 introduce the “chamber” as a dependent claim feature and thus are also subject to the 35 U.S.C. § 112, second paragraph rejection.
within the scope of rejected claims 83 and 88-89 and claims dependent thereon.

However, it is probably the case that Dart intends to cover a "chamber" of the type described in ¶¶ 1053 and 1054 as being a "gap." The gap is created by intentionally designing the depth of the mounting element to be shorter than the depth of the recess so that a "gap" is created for the purpose of creating a reservoir to keep the top of the lid dry. In our view, the features of the "gap" are not necessarily translated into claim 84 through the use of "chamber."

If this were an infringement case, we might be inclined to construe "chamber" as being the "gap" described in ¶¶ 1053 and 1054. However, this is not an infringement case. The application is pending before the Patent Office and time to avoid any possible problem in the event claim 84 is issued in a patent is while the application is pending. To put off a claim interpretation issue on to the public and a district court is not an efficient implementation of the patent system. See e.g., Graham, 383 U.S. 18 (to await litigation is—for all practical purposes—to debilitate the patent system). We are confident that Dart can probably amend claim 84 in such a manner as to (1) more clearly set out what Dart regards as its "chamber" invention, (2) overcome our concerns and (3) would meet with the approval of the Examiner. We note that the Examiner has not rejected claim 84 over the prior art. We likewise know of no basis for rejecting the claim over the prior art, provided it is further limited consistent with the views set out above.
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Rejection of previously allowed claims

In light of foregoing, we reject claims 4-7, 31-33, 64, 78, and 79 under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Freek, Waterbury, Mueller, Aichert, De Mars, and Lane.

Claims 4, 5, 6, 31, 32, 33, 78, and 79 all cover the feature of a drink opening in a lid having a well and a drink plug received within the well by press fitting it to the well.

Freek teaches a plug or closure formed within the drink opening 20 which is removed prior to consumption (Freek, col. 3 ll. 63-65). Further, we read the opening in the sheet material forming the lid in Freek as a "well". Webster's Collegiate Dictionary Tenth Edition (1996) defines "well" inter alia, as 4: an open space extending vertically through floors of a structure; 6b: a deep vertical hole. Since the opening extends through the entire thickness of the sheet material, it is read as a "deep" hole.

Waterbury, among others, teach a closure element 31 having a depending portion 36 complementarily shaped with the pour opening in the lid so as to create a reusable press fitting closure. (Waterbury, Col. 5, ll. 30-34)

One having ordinary skill in the art would modify the opening 20 in Freek to include the reusable press fit closure of Waterbury for the reasons set forth supra. Regarding the periphery well wall recited in claims 6 and 33, we note the thickness of the thermal plastic material forming the lid 10 in Freek is read as the periphery well wall.

The recitation in claim 7 of a bottom wall in the opening is met by the teaching in Freek of a bottom wall extending from the peripheral wall in the
lugs 42 formed in lid 10 which, if located at the bottom of the drink opening 20, would similarly provide a stop surface for the drink plug, as it does between successively stacked lids.

The recitation in claim 64 of the top wall reduced at opposite ends of the drink opening is met by the portions of the wall adjacent the drink opening 20 in Freek causing a reduced surface area of material.

**G. Conclusions of law**

Appellant has not sustained its burden on appeal of showing that the Examiner erred in rejecting the claims on appeal as being unpatentable under 35 U.S.C. § 103(a) over the prior art.


Claim 4-7, 31-33, 64, 78, and 79 (which are not on appeal) are also unpatentable under 35 U.S.C. § 103(a) over the prior art.

Claim 84 and claims 85-87 which depend from claim 84, as well as claims 40-43 and 71-74, are unpatentable under the second paragraph of 35 U.S.C. § 112.

On the record before us, Dart is not entitled to a patent containing any of the pending claims in the application on appeal.

**H. Decision**

Upon consideration of the record, and for the reasons given, it is ORDERED that the decision of the Examiner rejecting claims 3, 9-11, 27-29, 36-39, 44-50, 63, 65-70, 75-77, 80-83, and 88-95 over the prior art is **affirmed**.
FURTHER ORDERED that the appeal is dismissed as to claims 49-59.

FURTHER ORDERED that previously allowed claims and claims previously indicated as containing allowable subject matter, i.e., claims 84-87, 40, 41, 42, 43, and 71-74 are rejected as being unpatentable under 35 U.S.C. § 112, second paragraph, as being indefinite.

FURTHER ORDERED that previously allowed claims 4-7, 31-33, 64, 78, and 79 are rejected as being unpatentable under 35 U.S.C. § 103(a).

FURTHER ORDERED that since our application of the references differs from that of the Examiner and we have cited additional prior art, and because we have rejected previously allowed claims, our affirmance and rejection of objected to and allowed claims are designated as a new rejection. 37 C.F.R. § 41.50(b) (2006).

FURTHER ORDERED that our decision is not a final agency action.

FURTHER ORDERED that within two (2) months from the date of our decision Appellants may further prosecute the application on appeal by exercise one of the two following options:

1. Request that prosecution be reopened by submitting an amendment or evidence or both. 37 C.F.R. § 41.50(b)(1) (2006).

2. Request rehearing on the record presently before the Board. 37 C.F.R. § 41.50(b)(2) (2006).
FURTHER ORDERED that the time for taking action under either 37 C.F.R. §41.50(b)(1) or 41.50(b)(2) is not extendable under the provisions of 37 C.F.R. § 1.136(a) (2006).

AFFIRMED-IN-PART and DISMISSED-IN-PART ALLOWED CLAIMS REJECTED (37 C.F.R. § 41.50(b) (2006))

JRG/vsh

MCGARRY BAIR PC
32 Market Ave. SW
SUITE 500
GRAND RAPIDS, MI 49503


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