

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* TED R. ROBINSON

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Appeal 2008-1994  
Application 10/993,820  
Technology Center 3700

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Decided: August 20, 2008

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Before FRED E. McKELVEY, *Senior Administrative Patent Judge*,  
RICHARD TORCZON, and SALLY GARDNER LANE, *Administrative  
Patent Judges*.

Opinion filed by TORCZON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Claims 1 and 3 stand rejected under 35 U.S.C. § 103 (Ans. at 3). The appellant (Robinson) seeks review under 35 U.S.C. § 134. We have jurisdiction under 35 U.S.C. § 6(b).

The examiner relies upon the following prior art in rejecting the claims (Ans. at 2):

Adaska et. al.

US 5,335,851

9 August 1994

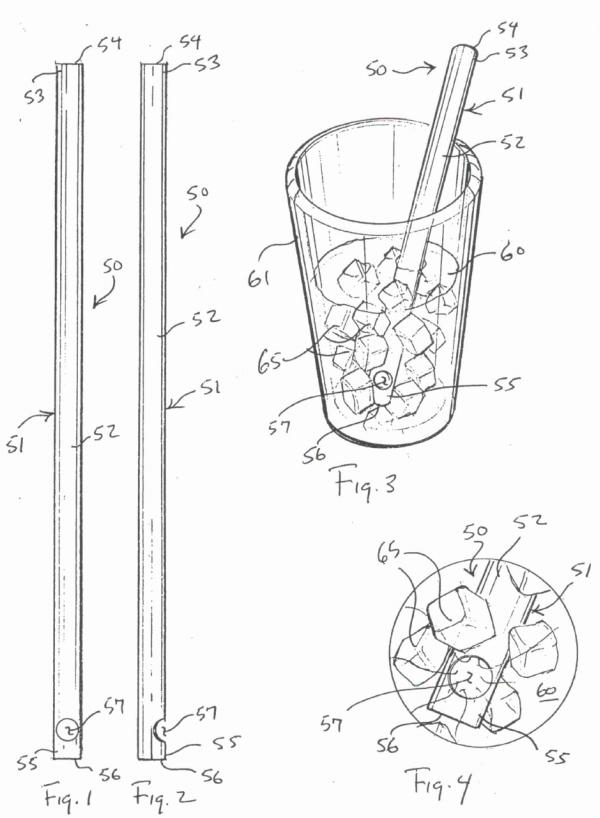
We AFFIRM.

### THE CLAIMED INVENTION

The claimed invention relates to a drinking straw (Spec. at 1).

Claim 3<sup>1</sup> depends on claim 1. Robinson does not offer a separate argument for claim 3 (Br. at 6-17). Claim 3 therefore stands or falls with claim 1.

Robinson's Figures 1-4 are reproduced below:



<sup>1</sup> Both Robinson and the examiner treat claim 3 as pending and claim 2 as withdrawn (Br. at 4 and Ans. at 2).

FIG. 1 is a front elevation of a straw; FIG. 2 is a side-elevation view of the straw; FIG. 3 is a perspective view of the straw; and FIG. 4 is an enlarged, fragmented-perspective view of the inlet end of the straw (Spec. at 8)

With reference to Robinson's Figures 1-4 (drawing numerals added), claim 1 reads (Br. at 19-20):

A straw 50, comprising:

a fluid tube 51 including an upstanding continuous sidewall 52 having a proximal end 53 forming an outlet 54, and an opposing distal end 55 forming an inlet 56;

the outlet 54 and the inlet 56 allowing liquid 60 [Fig. 3] to be drawn through the fluid tube 51 from the distal end 55 to the proximal end 53 under suction pressure [specification, page 12, l. 24 to page 13, l. 2];

a port 57 through the continuous sidewall 52 adjacent the distal end 55 thereof;

the outlet 54 defining a first size;

the inlet 56 defining a second size; and

the port 57 defining a third size;

wherein the second size is at least one of equal to and [sic, "or"] greater than the first size, and the third size is at least one of equal to and [sic, "or"] greater than the first size, such that in the event the inlet 56 becomes obstructed the port 57 will function at least equally as well as the inlet 56 providing uninterrupted flow of liquid 60 through the fluid tube 52 from the distal end 55 to the proximal end 53 under suction pressure.

## ROBINSON'S PRINCIPAL ARGUMENTS

Robinson contends that Adaska does not teach that the inlet of the straw is equal in size to the outlet of the straw (Br. at 11).

Robinson also contends that the claim requires the port size to be at least as large as the outlet size of the straw. According to Robinson, Adaska's side aperture **16** appears to be smaller in size as compared to the outlet **12** of the Adaska straw (Br. at 13).

Finally, Robinson alleges that Adaska teaches away from the claimed invention (Br. at 14).

## ISSUE

The issue before us is whether Robinson has sustained his burden on appeal of establishing that the examiner erred in rejecting claims 1 and 3 under 35 U.S.C. § 103 over the prior art.

## FINDINGS OF FACT

1. Adaska discloses a drinking straw (Adaska, col. 1, ll. 5-9).
2. Adaska's straw **10** is generally cylindrical, with a proximal end **11** and a distal end **12** (Adaska, col. 2, ll. 49-53 and Adaska's FIG. **1** and FIG. **2a** shown below).

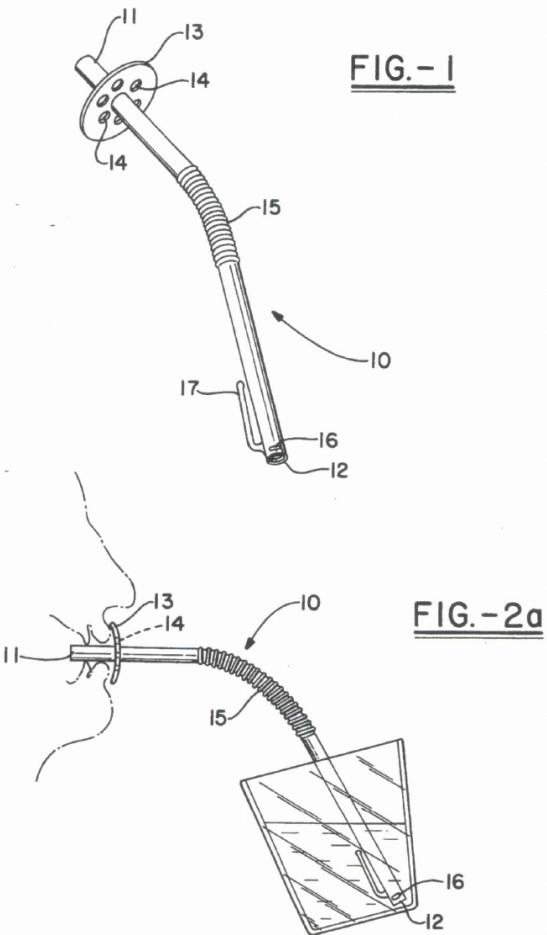


FIG. 1 is a perspective view and FIG. 2a is a side view.

3. The drinking straw has at least one side aperture **16** close to the distal end **12** of the straw **10** (Adaska, col. 1, ll. 58-63).

4. Adaska's side aperture **16** is said to prevent the drinking straw **10** from forming a seal against a flat surface of the drinking cup, which would inhibit the flow (Adaska, col. 3, ll. 14-17).

5. According to Robinson, a difference between the claimed invention and Adaska's straw is that Adaska's side aperture **16** appears to be smaller in size as compared to the size of the outlet **11** (Br. at 13).

6. Further, according to Robinson, a second difference is that Adaska's inlet **12** has not been shown to be the same size as or larger than the outlet **11** (Br. at 13).

7. A person of ordinary skill in the art would have known that a conventional drinking straw may form a seal on the bottom of the cup causing liquid intake to stop momentarily (Adaska, col. 1, ll. 47-51; col. 3, ll. 14-17).

8. It would have been readily apparent to one skilled in the art that Adaska's side apertures **16** would have to be at least as large as the inlet **12** to ensure comparable ease of use when the inlet is blocked.

9. Since Adaska's straw is generally cylindrical, we infer that the inlet and outlet are the same size.

10. Adaska does not teach away from the claimed invention.

#### PRINCIPLES OF LAW

In analyzing obviousness, the scope and content of the prior art must be determined, the difference between the prior art and the claim ascertained, and the ordinary level of skill in the art resolved. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966). A reference can be said to teach away from a claimed invention when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). See also *United States v. Adams*, 383 U.S. 39, 51 (1966) (finding that prior teachings discouraged the claimed combination, which thus produced an unexpectedly battery).

## ANALYSIS

Robinson argues that Adaska is silent as to whether the inlet **12** is equal in size to the outlet **11** of the straw (Br. at 13). Adaska discloses a generally cylindrical drinking straw **10** (Findings 1 and 2). A person of ordinary skill in the art would have known that the ends, and thus the inlet and outlet, of a cylindrical straw, are the same size (Findings 2 and 9).

Robinson further argues that the apparent size difference between Adaska's side aperture **16** and outlet **11** does not satisfy the claim limitation that the third (side-aperture) size is equal to or greater than the first (outlet) size (Br. at 13). The examiner has a complete answer to Robinson's argument (Ans. at 5):

Adaska et al. teaches that the port **16** is provided to prevent the straw from forming a seal against the flat surface of a [sic] the drinking cup, therefore one or ordinary skill in the art would choose the opening size or number of openings to ensure that the straw will still function properly if the straw were to seal against the flat surface of the cup or if it sealed against a piece of ice for example. Liquid will flow through the port **16** and through the outlet **11** when the straw does seal on the bottom of the cup or a piece of ice. It would be clear to one of ordinary skill in the art that the larger the cross-sectional area of the port or the larger the sum of the cross-sectional areas of several ports ... more fluid [would] ... flow through the port such that the straw would not seal against the bottom of the cup or a piece of ice. That Adaska et al discloses that preferably several ports are provided [it] is [nevertheless] clear that Adaska et al. recognized that ... more fluid flowing through the port or ports, would be more effective in preventing the straw from sealing on the bottom [of] a cup. Therefore, if Adaska et al provided several ports such that the sum of the cross-sectional areas [of those ports] equaled the cross-section area of the outlet, one of ordinary skill in the art would [have] recognize[d] that providing a port with the same cross-sectional

[area] of the sum of the three ports would perform equally as well and that the Adaska et al straw would function equally as well with the cross-sectional areas of the port and the outlet being the same.

Adaska's drinking straw has a side aperture **16** that helps prevent the straw **10** from forming a seal against the flat surface of the drinking cup, which would inhibit the flow of liquid (Findings 4 and 7). As the examiner aptly points out, the side aperture **16** must be at least as large as the outlet **11** to ensure that straw operates efficiently when the inlet **12** is blocked as when it is not blocked. Therefore, the examiner's finding that one skilled in the art would have known to size the side aperture **16** at least as large as the outlet **11** is reasonable because one skilled in the art would have known how to ensure ease of operation (Finding 8).

Finally, Robinson argues that Adaska teaches away from using anything other than a plurality of side apertures **16** (Br. at 14). Adaska teaches at least one aperture (Finding 3). Adaska states a preference for more than one side aperture, since multiple side apertures would provide redundancy should one aperture, in addition to the inlet **12**, get blocked. A preference does not, however, negate the express teaching in Adaska that one side aperture is acceptable. Cf. *In re Mills*, 470 F.2d 649, 651 (CCPA 1972) (holding that all disclosures in a reference must be evaluated, including non-preferred embodiments.); *In re Chapman*, 357 F.2d 418, 424 (CCPA 1966) (holding a reference can be used for all it realistically teaches and is not limited to the disclosure of specific illustrated examples). We find that one ordinary skill in the art after reading Adaska would not be discouraged from using one side aperture **16** (Finding 10).

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## CONCLUSION

Robinson has failed to show that the examiner erred in rejecting the claim 1 over the prior art. Consequently, the rejection of claims 1 and 3 under § 103(a) is—

**AFFIRMED**

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