

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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex Parte RYO MIYAKE, AKIRA KOIDE,
TAKEO TAKAGI, TAKAO TERAYAMA,
YASUSHI NOMURA and HIROSHI MITSUMAKI

Appeal No. 2002-0230
Application 09/136,070

HEARD: January 16, 2003

Before GARRIS, OWENS and JEFFREY T. SMITH, *Administrative Patent Judge*.

JEFFREY T. SMITH, *Administrative Patent Judge*.

Decision on appeal under 35 U.S.C. § 134

Applicants appeal the decision of the Primary Examiner's refusal to allow claims 1, 7, 15 to 20.^{1, 2} We have jurisdiction under 35 U.S.C. § 134.

¹ The claims on appeal are presented as amended in the after final response filed November 2, 2000. The Examiner has entered the amendment to the claims in the record. (Paper no. 7).

² According to Appellants, Brief, page 2, pending claims 2 to 6, 8 to 14 and 21 to 25 have been withdrawn from consideration by the Examiner as being directed to a non elected invention.

THE INVENTION

The Appellants' claimed invention relates to a chemical analyzing apparatus incorporating a reagent supply mechanism. Conventionally, in automatic chemical analyzing apparatus, reagents are discharged by a piston integrally incorporated with the side wall of the reagent container. (Paragraph bridging Specification pages 2-3). Appellants have found that the conventional chemical analyzing apparatus have several drawbacks including loss of reagent, cleaning the apparatus requires a large volume of washing liquid which is difficult to remove from the nozzle, and errors in measured values due to wash liquid remaining in the nozzle. (Specification, page 4). According to Appellants, the claimed invention is said to overcome the above disadvantages. (Specification, page 9). Claim 1 which is representative of the invention is reproduced below:

1. A chemically analyzing apparatus comprising:

a reaction container holder for holding a plurality of reaction containers, and for moving said plurality of reaction containers to predetermined positions;

a plurality of reagent containers containing reagents therein, each of said plurality of reagent containers having a connection hole provided in a bottom surface;

Appeal No. 2002-0230
Application No. 09/136,070

a reagent container holder for holding said plurality of reagent containers;

a measuring part for measuring physical properties of said sample; and

a liquid feed mechanism having a fluid introduction part connected to said connection hole provided in the bottom surface of each of said plurality of reagent containers.

CITED REFERENCES

As evidence of unpatentability, the Examiner relies on the following references:

Rokugawa	4,844,868	Jul. 04, 1989
Ushikubo	5,424,036	Jun. 13, 1995
Zengerle et al. (Zengerle)	5,529,465	Jun. 25, 1996

The Examiner rejected claims 1, 7, 15 to 18 and 20 under 35 U.S.C. § 103(a) as obvious over the combination of Rokugawa and Zengerle. The Examiner also rejected claim 19 under 35 U.S.C. § 103(a) as obvious over the combination of Rokugawa and Zengerle as applied to claim 15 further combined with Ushikubo. (Answer, pp. 4-5).

OPINION³

Upon careful review of the respective positions advanced by Appellants and the Examiner, we find ourselves in agreement with Appellants' position in that the Examiner has failed to carry the burden of establishing a *prima facie* case of obviousness. *See In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). Accordingly, we will not sustain the examiner's rejection. We will limit our discussion to claim 1, the sole independent claim.

Rokugawa describes a chemical analyzing apparatus incorporating a reagent supply mechanism. The apparatus includes two reagent distribution mechanisms (30) and (40) each has a rotary table 64 driven by drive motor (62). Secured to each rotary table (64) are a plurality of reagent distributors (68) for distributing different reagents. (Col. 4, ll. 9-11; Fig. 6). Each reagent distributor (68) includes reagent phial (70) containing reagent 66 and pump (72) for withdrawing reagent (66) from the reagent phial (70). (Col. 4, ll. 11-14; Fig. 4). Pump (72) has check valve (76) secured to the wall of reagent phial (70), cylindrical member (78) secured to and extending upright from check valve (76) and nozzle (32) secured to and extending downward from

³ In rendering this decision, we have considered Appellants arguments presented in the Brief, filed March 5, 2001, and Reply Brief, filed July 23, 2001.

check valve (76). (Col. 4, ll. 16-20; Fig. 4). Rokugawa discloses each of the reagent phial (70) is secured to the top of its respective second rotary table (64), and nozzle (32) of each pump (72) is positioned outside the edge of its respective second rotary table (64). (Col. 4, ll. 49-53; Fig. 1). The reagent phial does not have a connection hole in the bottom or a fluid introduction part connected to the bottom of the reagent phial.

Claim 1 requires a plurality of reagent containers having a connection hole provided in a bottom surface and a liquid feed mechanism having a fluid introduction part connected to the connection hole in the bottom surface of each of the reagent containers. The Examiner has not adequately explained why there is motivation to move the connection hole from the side of the reagent container of Rokugawa. It would not have been obvious to place a connection hole in the bottom of the reagent phial (70), as proposed by the Examiner, because Rokugawa expressly discloses the reagent phial (70) is secured to the top of its respective rotary table (64).

Consequently, the modification proposed by the Examiner would require the redesign of the reagent distribution mechanism including phial (70) and the rotary table (64) to which it is secured. The Examiner cited Zengerle for teaching an electrostatically driven diaphragm pump. This reference does not solve the deficiencies of Rokugawa

Appeal No. 2002-0230
Application No. 09/136,070

identified above. The mere fact that the prior art could be modified as proposed by the Examiner is not sufficient to establish a *prima facie* case of obviousness. *See In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992).

We agree with Appellants that the Examiner's conclusion that it would have been obvious to move the location of the connection hole to the bottom of the reagent container of Rokugawa is unsupported by any teaching in the prior art. (Brief, p. 5). The Examiner asserts "[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to have locate the connection hole at the bottom of the reagent container in order to allow the reagent to be dispensed under the force of gravity, thereby eliminating the need for extra pressure head." (Answer, paragraph bridging pages 4 -5). Additionally, the Examiner asserts "the location at the bottom-most surface of the reagent container ensures that the entire reagent is removed." (Answer, p. 6). The record indicates that the motivation relied upon by the Examiner for moving the location of the connection hole comes from the Appellants' description of their invention in the specification, pages 16-18, rather than coming from the applied prior art and that, therefore, the Examiner used impermissible hindsight in rejecting the claims. *See W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983); *In re*

Appeal No. 2002-0230
Application No. 09/136,070

Rothermel, 276 F.2d 393, 396, 125 USPQ 328, 331 (CCPA 1960). Consequently, the Examiner's rejection of claims 1, 7, 15 to 18 and 20 is reversed.

The Examiner contends "the conclusion of obviousness is not based on hindsight reconstruction but rather basic scientific principles of fluid dynamics and gravitation forces. It is notoriously well known within the dispensing art that such a location of a fluid connection hole at the lowest point on the container takes advantage of the additional effects of gravity upon the volume of the fluid."

(Answer, pp. 6-7). Rokugawa expressly discloses the reagent phial (70) is secured to the top of its respective rotary table (64). The reagent phial (70) is positioned so that the pump (72) has check valve (76) secured to the lower wall of reagent phial (70).

There is no indication that the "effects of gravity upon the volume of the fluid" would provide a benefit that would have warranted the redesign of Rokugawa's reagent distribution mechanism that includes a pump for dispensing the reagent.

The Examiner added the teachings of the Ushikubo reference to the combination of Rokugawa and Zengerle, as applied to claim 15, to reject the subject matter of claim 19. We reverse this rejection because Ushikubo does not solve the deficiencies of Rokugawa discussed above.

Appeal No. 2002-0230
Application No. 09/136,070

CONCLUSION

The rejection of claims 1, 7, 15 to 18 and 20 under 35 U.S.C. § 103(a) as obvious over the combination of Rokugawa and Zengerle is reversed. The rejection of claim 19 under 35 U.S.C. § 103(a) as obvious over the combination of Rokugawa and Zengerle as applied to claim 15 further combined with Ushikubo is reversed.

REVERSED

TERRY J. OWENS)
<i>Administrative Patent Judge</i>)
) BOARD OF PATENT
)
) APPEALS AND
)
JEFFREY T. SMITH) INTERFERENCES
<i>Administrative Patent Judge</i>)
)

JTS/kis

Appeal No. 2002-0230
Application No. 09/136,070

BRADLEY R. GARRIS, *Administrative Patent Judge*, dissenting.

I respectfully dissent from the majority's decision to reverse the prior art rejections advanced by the examiner on this appeal.

I share the examiner's conclusion that it would have been obvious for one with ordinary skill in this art to reposition the connection hole of Rokugawa's reagent container from its existing location at a sidewall surface to a new location at the bottom surface of the container as required by appealed independent claim 1.

According to the majority, "[t]he Examiner has not adequately explained why there is motivation to move the connection from the side of the reagent container of Rokugawa." Slip Op., page 5. This is incorrect.

The examiner has advanced two separate rationales in support of her determination that an artisan with ordinary skill would have been motivated to reposition Rokugawa's connection hole in the manner discussed above. In her first rationale, the examiner urges that an artisan would have been motivated to reposition patentee's connection hole in order "to allow the reagent to be dispensed under the force of gravity [i.e., the additional gravity force at a bottom versus sidewall location due to the greater mass of reagent thereabove]." Answer, page 6. As her second rationale in support of motivation, the examiner states that, "[a]dditionally, the

location at the bottom-most surface of the reagent container ensures that the entire reagent is removed, providing a more cost-effective dispensing means.” Id.

It is the position of the majority that “the motivation relied upon by the Examiner for moving the location of the connection hole comes from the Appellants’ description of their invention in the specification, pages 16-18, rather than coming from the applied prior art and that, therefore, the Examiner used impermissible hindsight in rejecting the claims.” Slip Op., page 6. I agree with the examiner, however, that her motivation rationale and consequent obviousness conclusion are not based on hindsight “but rather basic scientific principles of fluid dynamics and gravitation forces.” Answer, page 6. In this regard, it is the examiner’s express finding that “[i]t is notoriously well known within the dispensing art that such a location of a fluid connection hole at the lowest point on the container takes advantage of the additional effects of gravity upon the volume of the fluid.” Id., at pages 6-7. Particularly in light of this finding, the examiner concludes that “[o]ne skilled in the art would have recognized that modifying the location of a connection hole of Rokugawa would allow the fluid to be discharged with less pressure being applied, thereby increasing the overall efficiency of the pump with no additional working parts needed.” Id., at page 7.

Appeal No. 2002-0230
Application No. 09/136,070

Significantly, on the record of this appeal, the appellants have not challenged the examiner's above noted finding even though they had a clear opportunity to do so when they filed a reply brief in response to the examiner's answer. This is understandable since the applied prior art in general and Rokugawa in particular evince that one having an ordinary level of skill in this art at the time the appellants' invention was made would be thoroughly familiar with the "basic scientific principles of fluid dynamics and gravitation forces" upon which the examiner's motivation rationale and obviousness conclusion are based.

Under the circumstances, it is appropriate to regard the examiner's above noted factual finding as correct, especially since it has not been challenged or traversed by the appellants on the record of this appeal. See In re Ahlert, 424 F.2d 1088, 1091-92, 165 USPQ 418, 420-21 (CCPA 1970). Also see the Manual of Patent Examining Procedure (MPEP) § 2144.03 (8th ed., Aug. 2001). For this reason, and because the examiner's finding supports her motivation rationale and obviousness conclusion, I believe the majority to be in error in determining that "the Examiner used impermissible hindsight in rejecting the claims." Slip Op. at page 6.

In addition to the foregoing, it is noteworthy that, on the record before us, the appellants have not acknowledged much less critiqued the examiner's aforementioned

Appeal No. 2002-0230
Application No. 09/136,070

second rationale notwithstanding their clear opportunity to do so in filing their previously mentioned reply brief. Because the appellants themselves have not even alleged the presence of error in the examiner's second rationale, it is inappropriate for the majority to consider this rationale as failing to establish a *prima facie* case of obviousness.

For the reasons set forth above and in the answer, I believe the examiner has established a *prima facie* case of obviousness within the meaning of 35 U.S.C. § 103

Appeal No. 2002-0230
Application No. 09/136,070

with respect to at least appealed claim 1. I express no view concerning the other argued claims on appeal since the obviousness versus nonobviousness of these claims has not been separately addressed by the majority.

BRADLEY R. GARRIS
Administrative Patent Judge

)
) **BOARD OF PATENT**
) **APPEALS**
) **AND**
) **INTERFERENCES**
)
)

BRG:tdl

Appeal No. 2002-0230
Application No. 09/136,070

ANTONELLI, TERRY, STOUT & KRAUS
SUITE 1800
1300 NORTH SEVENTEENTH STREET
ARLINGTON, VA 22209