

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TOMAS KEMPE

Appeal No. 97-1595
Application No. 08/209,786¹

ON BRIEF

Before ABRAMS, PATE and McQUADE, *Administrative Patent Judges*.

ABRAMS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the decision of the examiner finally rejecting claims 1-10, which constitute all of the claims of record in the application.

The appellant's invention is directed to an apparatus for evaporating solvent from a plurality of solvent-containing

¹Application for patent filed March 11, 1994.

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sample vials. The subject matter before us on appeal is best illustrated by reference to claim 1, which has been reproduced in an appendix to the Brief on Appeal.

THE REFERENCES

The references relied upon by the examiner to support the final rejection are:

Bowser 1977	4,003,713	Jan. 18,
Friswell 1987	4,707,452	Nov. 17,

THE REJECTION

Claims 1-10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Friswell in view of Bowser.

The rejection is explained in the Examiner's Answer.

The opposing viewpoints of the appellant are set forth in the Brief and the Reply Brief.

OPINION

The appellant's invention provides an apparatus useful for evaporating solvents from a plurality of solvent-

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containing vials, which are supported in a single chamber closed by a sealing cover. Associated with each vial is an air channeling device, such as a needle, which extends through an aperture in the cover. As described on page 7 of the specification,

[a]s the vacuum source is begun a vacuum is created within the chamber, which in turn, draws air or gas through the air channeling devices within cover apertures 26. Preferably, the gas flowing through each aperture is directed to the desired position within or above each respective vial. The gas flow through the apertures and into the vials, in turn, provides a blow-down evaporative effect. Since a vacuum is being applied, the air or inert gas will simultaneously flow through the needle and agitate the solution, being drawn by the vacuum itself. As the gas is eventually drawn back out of the vial and through the passageway by continuing vacuum effect, it will tend to also carry the evaporated solvent vapors with it.

This is manifested in independent claim 1 by the requirement that there be "a recessed sample chamber...comprising a plurality of well positions..., a positionable chamber cover dimensioned to form an air tight seal...upon the chamber...[and] comprising a plurality of access apertures." A vacuum circuit is specified which connects a source to the chamber. Similar language appears in independent claim 8.

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The claims stand rejected as being unpatentable over Friswell in view of Bowser. The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a *prima facie* case of obviousness under 35 U.S.C. § 103, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, for example, *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1052 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988).

Friswell discloses a system for evaporating liquid from a chemical sample. It comprises a heated processing station

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(40) in which there are a plurality of test tube holding receptors (50). The material to be acted upon is placed in a test tube, which is installed in one of the cavities. The test tube is closed by a closure (16), through which extends a gas inlet (18) and an outlet (20). In operation, pressurized gas is introduced through the inlet in a manner which establishes a helical pattern (Figure 1). The motion of the gas induces the removal of the liquid to be evaporated from the test tube through the outlet.

Friswell fails to disclose or teach a source of vacuum to induce the flow of gas to be evaporated, a chamber in which are a plurality of positions for receiving sample vials, a cover for the chamber, a plurality of apertures in the cover in alignment with the positions for receiving the vials, and an air channeling device in each of the apertures.

Bowser discloses a multiple tube evaporator. It comprises a cover having an aperture for each of a plurality of test tube receiving stations, which are supported in a framework. There is no chamber in which multiple tubes are received. Each test tube is pressed into a conical upper seat (35), which effects a "semi-closure" of the open top of the

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tube (column 2, line 42). An evaporating needle (37) extends from a manifold into each tube. According to the patentee,

[w]hen an ordinary vacuum line is connected to the connector 34 of the intake block 31, a vacuum will be created through the manifold 23 and effect evaporation of the contents of each of the test tubes 20 so as to effect evacuation therefrom. Through the use of the device, either positive or negative air pressures may be supplied through the manifold to effect the evaporation process. Column 2, lines 43-50.

From this, the examiner concludes that it would have been obvious to have "provided or connected Friswell's outlet to conduit with a well known vacuum source" because

it is well known in the art that vacuum evaporation is advantageous over positive gas flow in some instances. It is known that positive gas flow evaporation may blow contaminants into the sample. Vacuum evaporation is advantageous because it would minimize the opportunity of foreign material blowing into the sample during evaporation. Answer, page 5.

Initially, we must point out that there is no evidence of record in support of these conclusions of the examiner.

Therefore, rather than constituting suggestion to combine the teachings of the references, they can be regarded only as speculation and assumption.

From our perspective, neither of the references discloses or teaches the required chamber having a plurality of

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positions for receiving sample vials, a cover for the chamber which has an aperture aligned with each of the vial positions, an air channeling device through each aperture to provide air into each of the vials, and a vacuum circuit for communicating a source of vacuum to the chamber. In Friswell, each tube has its own cover; in Bowser the tubes share a common cover, but there is no "chamber" containing a plurality of tubes, and there is no vacuum line in addition to the individual air channeling devices. This being the case, there is no basis by which it can be concluded that suggestion exists for combining the references in such a fashion as to yield the structure recited in claims 1 and 8.

Also, Friswell relies upon the creation of a helical pattern in the pressurized gas inflow to evaporate the solvents, and there is no evidence to support the conclusion that replacing the pressurized gas injected through the inlet with a vacuum suction on the outlet would result in the device operating in the manner intended. This, in our view, would have operated as a disincentive to one of ordinary skill in the art to modify Friswell in the manner proposed by the examiner.

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We therefore will not sustain the rejection of independent claims 1 and 8 or, it follows, of dependent claims 2-7, 9 and 10.

The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS)	
Administrative Patent Judge))	
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WILLIAM F. PATE, III)	BOARD OF PATENT
Administrative Patent Judge))	APPEALS AND
))	INTERFERENCES
))	
JOHN P. McQUADE)	
Administrative Patent Judge))	

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