

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. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANZ BUCHI et al.

Appeal No. 2001-2193
Application No. 09/152,515

HEARD: November 13, 2001

Before ABRAMS, STAAB, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 10, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to a liquid fuel pressure atomizing nozzle. A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Squire et al. 1892 (Squire)	478,295	July 5,
Forney 1932	1,887,407	Nov. 8,
Gebhardt et al. 1968 (Gebhardt)	3,401,883	Sep. 17,
Akimoto et al. 18, 1997 (Akimoto)	5,603,456	Feb.

Claims 1, 2, 4 and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Forney.

Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Forney and Squire.

Claims 4 to 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Forney and Gebhardt.

Claim 9 stands rejected under 35 U.S.C. § 103 as being unpatentable over Forney and Gebhardt as applied to claim 4 above, and further in view of Squire.

Claim 10 stands rejected under 35 U.S.C. § 103 as being unpatentable over Forney and Akimoto.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the final rejection (Paper No. 14, mailed May 9, 2000) and the answer (Paper No. 21, mailed February 1, 2001) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 20, filed December 21, 2000) and reply brief (Paper No. 23, filed April 2, 2001) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The anticipation rejection

We will not sustain the rejection of claims 1, 2, 4 and 10 under 35 U.S.C. § 102(b).

To support a rejection of a claim under 35 U.S.C. § 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Claim 1, the sole independent claim on appeal, reads as follows:

A liquid fuel pressure atomizing nozzle for gas-turbine burners, comprising a nozzle body having at least two separate feed passages for one liquid to be atomized, the first feed passage being at least partly enclosed by the second feed passage and also being connected downstream to an outer space via a discharge orifice, and the second feed passage likewise being connected to the outer space, wherein the second feed passage has at least two discharge orifices to the outer space wherein an axis of each of said at least two discharge orifices are oriented outwardly from a central axis of said first feed passage.

Forney discloses a burner constructed to burn either gas or oil atomized by steam prior to discharge. Figure 1 of Forney shows a furnace equipped with a burner and Figure 3 of Forney shows a sectional view of the burner. Forney teaches that gas flows from pipe 37 into chamber 34, then into the space between tubes 28 and 29, then to the space between tip 31 and sleeve 59, and then to outlet ports 58 angled relative to the longitudinal axis of the tubes 28 and 29. Forney also teaches that steam flows from pipe 47 into tube 30, then into nozzle 65, then to sleeve 59 where it atomizes oil injected through ports 64 in the sleeve 59, and then to outlet ports 57. Forney provides that oil is supplied from pipe 42 to the space between pipes 29 and 30 for flow to the ports 64. Forney does not teach the size of the ports 57 and 58.

We agree with the appellants that claim 1 is not anticipated by Forney. Specifically, we agree with the appellants that the preamble of claim 1 (i.e., a liquid fuel pressure atomizing nozzle) is a structural limitation that is not met by Forney. In our view, this structural limitation requires that at least one of the claimed discharge orifices

is sized so that a pressurized liquid fuel injected therefrom will atomize. Forney does not teach that any of his ports 57 and 58 are sized so that a pressurized liquid fuel injected therefrom will atomize. Additionally, it is well-settled that under principles of inherency, when a reference is silent about an asserted inherent characteristic, it must be clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). As the court stated in In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981)(quoting Hansgirk v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)):

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient. [Citations omitted.] If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

In this case, it is not clear that the missing descriptive matter (i.e., that ports 57 and 58 are sized so that a

pressurized liquid fuel injected therefrom will atomize) is necessarily present in the description of Forney, and that it would be so recognized by persons of ordinary skill.

For the reasons set forth above, claim 1 is not anticipated by Forney. Accordingly, the decision of the examiner to reject claim 1, and claims 2, 4 and 10 dependent thereon, under 35 U.S.C. § 102(b) is reversed.

The obviousness rejections

We have also reviewed the references (i.e., Squire, Gebhardt and Akimoto) additionally applied in the rejection of claims 3 to 10 under 35 U.S.C. § 103 but find nothing therein which makes up for the deficiency of Forney discussed above. Accordingly, we cannot sustain the examiner's rejection of appealed claims 3 to 10 under 35 U.S.C. § 103.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 to 10 is reversed.

REVERSED

NEAL E. ABRAMS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
LAWRENCE J. STAAB)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JEFFREY V. NASE)	
Administrative Patent Judge)	

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