

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARTIN MAIER, NORBERT BELZNER, JORG HEYSE
AND CHRISTIAN PREUSSNER

Appeal No. 97-3193
Application 08/467,326¹

ON BRIEF

Before STAAB, McQUADE , and CRAWFORD , Administrative Patent Judges.

STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1 and 4.

¹ Application for patent filed June 6, 1995. According to appellants, the application is a continuation of Application 08/202,416, filed February 28, 1994, abandoned.

Claims 2 and 3, the only other claims remaining in the application, have been allowed.²

Appellants' invention pertains to a perforated spray disk for use in an injection valve of a fuel injection system for an internal combustion engine. The disk has at least one spray opening having a frustoconical form that flares in the downstream direction. This shape is said to minimize variations in the volume of medium flowing through the openings. Independent claim 1 is illustrative of the appealed subject matter and reads as follows:

1. A perforated spray disk for a valve having a lengthwise valve axis and a fluid flow direction, comprising:

an upper surface;

a lower surface;

a metal³ spray disk central region, the central region having at least one spray opening;

the at least one spray opening being formed by electrical discharge machining and having a frustoconical form which expands in the flow direction around an opening axis, the at least one spray opening frustoconically extending from the upper surface to the lower surface; and

² An amendment filed subsequent to the final rejection on December 9, 1996 (Paper No. 21), wherein claim 2 was rewritten in independent form and claim 3 was amended to depend from claim 2, has been entered. See the advisory letter mailed January 3, 1997 (Paper No. 22).

³As shall be seen in our discussion *infra*, appellants make much of the fact that the Erb patent applied by the examiner against the claims does not expressly disclose element 37 as being composed of metal. We note in passing, however, that appellants' original disclosure likewise does not expressly disclose spray disk as having a central region composed of metal.

the opening axis and the lengthwise valve axis being parallel.

The single reference of record relied upon by the examiner in support of a rejection under 35 U.S.C. § 102(b) is:

Erb et al.	4,018,387	Apr. 19, 1977
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Claims 1 and 4 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Erb. It is the examiner's position that:

Erb et al. [in Figure 5] shows all [elements] of the basic device including an upper surface at 49, a lower surface opposite 49, a metal spray disk 37 with a central opening 47, the opening being frustoconical form which expands in the flow direction and frustoconically extending from the upper surface to the lower surface, and the central region being flat. The disk is capable of being formed by electrical discharge machining.

At the outset, we note that appellants have not argued the appealed claims separately. Therefore, claims 1 and 4 will stand or fall together in accordance with the success or failure of the appellants' arguments. See *In re Hellsund*, 474 F.2d 1307, 1309-10, 177 USPQ 170, 172 (CCPA 1973); *In re Wood*, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978); and *In re Nielson*, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987).

Appellants argue on pages 4 and 5 of the brief that element 37 of Erb is not a perforated spray disk for a valve. Specifically, appellants assert that

element 37 of the Erb Patent is a cap element for a nebulizer, which is provided on its side with a liquid inlet 44 for allowing a liquid to enter a liquid supply chamber 46, which is positioned below a cap element 37. . . . Thus,

Appellants assert that the cap element 37 of the Erb Patent is **not for a valve**, much less does it constitute a valve spray disk [as claimed]
[Brief, page 5; bold in original.]

This argument is not persuasive. First of all, the preamble recitation in each of the independent claims on appeal that the claimed spray disk is “for a valve” having certain characteristics amounts to a statement of intended use which cannot be relied upon to distinguish the claimed structure over a prior art structure which otherwise satisfies all the structural limitations of the claims. *See, for example, In re Yanush*, 477 F.2d 958, 959, 177 USPQ 705, 706 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 1032, 168 USPQ 530, 534 (CCPA 1971); *In re Casey*, 370 F.2d 576, 580, 152 USPQ 235, 238 (CCPA 1967); and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963). Accord for this proposition is found in *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997), wherein the Court noted that “[i]t is well settled that the recitation of a new intended use for an old product does not make a claim to that old product patentable.”

Secondly, in that the shims 48 provided on Erb’s piston element 38 may be formed of compressible material such that the pressure of gas flow acting against the underside of the piston element may be increased to the point that liquid flow stops (column 9, lines 52-60), Erb’s element 37 is “for a valve,” as broadly claimed. Further, in that appellants’ broad claim language is in an open-ended “comprising” format that does not exclude the

presence of other elements⁴, the fact that Erb's disk may include additional elements such as liquid inlet 44 is of no moment. Finally, to the extent appellants argue that Erb's disk element 37 is not usable in fuel injection valves⁵, the argument fails at the outset because neither of the appealed claims recite, either positively or inferentially, a fuel injector valve. *In re Self*, 671 F.2d 1344, 1348, 213 USPQ 1, 5 (CCPA 1982).

Appellants also argue that element 37 of Erb is not disclosed as being composed of metal. We do not agree. A drawing is available as a reference for all that it teaches a person of ordinary skill in the art. Further, a claimed invention may be anticipated by a drawing in a reference, whether the drawing disclosure is accidental or intentional. *In re Meng*, 492 F.2d 843, 847, 181 USPQ 94, 97 (CCPA 1974). Here, based on the drawing conventions approved by the PTO and in effect as of (1) the filing date (June, 19, 1975) of the parent S.N. 588,353 application to Erb, (2) the filing date (July 1, 1975) of the application that matured into the Erb patent, and (3) the issue date (April 19, 1977) of the Erb patent, as established by the Rules of Practice in effect at the time the application that

⁴See, for example, 2D. *Chisum, Patents* §8.06 (1) (1992).

⁵“Appellants further submit that . . . it would not be readily apparent to one of ordinary skill in the art of fuel injection valves to construct **a valve spray disk** . . . as recited in claim 1” (brief, page 5; bold in original).

matured into the Erb patent was filed,⁶ we find that the cross hatching used by Erb in depicting element 37 would have conveyed to one of ordinary skill in the art that element 37 is made of metal material. Although the Rules of Practice no longer include a section devoted exclusively to drawing conventions, current M.P.E.P.

§ 608.02, Drawings,⁷ indicates that the drawing conventions for cross hatching in effect at the time the Erb patent was filed continue to the present, thereby bolstering our view that one of ordinary skill in the art would regard Erb's element 37 as being made of metal material. In further support of our finding in this regard, we note that there is nothing in Erb's verbal description which would lead the ordinarily skilled artisan to a contrary conclusion. See *National Latex Products Co. v. Sun Rubber Co.*, 274 F.2d 224, 230, 123 USPQ 279, 283 (6th Cir. 1959) (mold considered to be metal based on cross hatching of drawings).

On page 6 of the brief, appellants argue, in effect, that since Erb purposefully discloses nebulizer disk 20 as being composed of metal (see column 4, lines 38-41), if Erb wanted to disclose other components as being composed of metal he would have done so. This argument is without merit because, as noted above, a disclosure in the drawings does not have to be purposeful in order to anticipate the claimed subject matter.

⁶ See the attached copy of 37 CFR § 3.61, Symbols for Draftsmen (revised as of July 1, 1976), which is representative of the rule for the time period in question.

⁷Copy attached.

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In re Meng, 492 F.2d at 847, 181 USPQ at 97. Appellants note that element 20 in Figure 1 of Erb is not cross hatched to indicate metal and urge that Erb's cross hatching for element 37 in Figure 5 would therefore be disregarded by one of ordinary skill in the art because Erb does not consistently follow the cross hatching scheme suggested in M.P.E.P. § 608.02. This argument is not well taken for the reason noted by the examiner, namely, Figure 1 of Erb is not a sectional view and therefore would not be expected to show elements with cross hatching. We simply disagree with appellants' argument on page 7 of the brief that Erb's cross hatching serves only to differentiate between components, and not to designate the "specific compositions" of components. In a nutshell, there is simply no reason for us to presume that one of ordinary skill in the art, in reading Erb's drawings, would ignore the conventional and well accepted cross hatching scheme used in patent drawings to indicate various materials for elements, as urged by appellants.

In light of the foregoing, the standing § 102 rejection of claims 1 and 4 is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

LAWRENCE J. STAAB)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN P. McQUADE)	
Administrative Patent Judge)	APPEALS AND
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)	INTERFERENCES
)	
MURRIEL E. CRAWFORD))	
Administrative Patent Judge)	

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