

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte R. BROWN WARNER and JOSEPH P. GASER

Appeal No. 1998-1807
Application No. 08/090,770¹

ON BRIEF

Before COHEN, CRAWFORD and GONZALES, Administrative Patent Judges

GONZALES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1 through 14 and 20 through 32. Claims 15 through 19, the other claims remaining in the application,

¹ Application for patent filed July 13, 1993.

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stand withdrawn from consideration under 37 CFR § 1.142(b) as being directed to a nonelected invention.

We REVERSE.

The invention relates to a method of making a low cost disposable plateau honing tool having an elongated mounting base and an elongated projecting section which terminates in an elongated working face which includes the steps of forming a mixture of a plastic melt and an abrasive material and injecting the mixture at high pressure into a mold to form the tool (specification, page 2). Claim 1 is illustrative of the subject matter on appeal and is reproduced below:

1. A method of making a plateau honing tool having an elongated mounting base, and a somewhat smaller elongated projecting section which terminates in an elongated working face of the tool comprising the steps of mixing a plastic melt and abrasive into a homogenous mixture, injecting such mixture into a mold at high pressure to form said honing tool, cooling the mixture, and removing the tool from the mold.

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

Pieper et al. 06, 1992 (Pieper)	5,152,917	Oct.
Wiand 1993	5,209,760	May 11,

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1991) (filed Jul. 18,
Hammar et al. 5,273,559
Dec. 28, 1993
(Hammar) (effective filing date Aug. 30,
1991)

The following rejections are before us for review:

Claims 1, 2, 8, 20, 21, 26, 30 and 31 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Wiand;

Claims 1, 2, 20 through 25 and 31 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hammar; and

Claims 1 through 14, 20, 21 and 26 through 32 stand rejected under 35 U.S.C. § 103 as being unpatentable over Wiand alone or in combination with Pieper.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the Answer (Paper No. 16) and the first and second supplemental Answers (Paper Nos. 18 and 20, respectively) for the examiner's complete reasoning in support of the rejections, and to the main Brief (Paper No. 15) and the first, second and third reply Briefs (Paper Nos. 17, 19 and 21, respectively) for the appellants' arguments thereagainst.

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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 issues

We reverse the rejection of claims 1, 2, 8, 20, 21, 26, 30 and 31 as being anticipated by Wiand and the rejection of claims 1, 2, 20 through 25 and 31 as being anticipated by Hammar.

Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be

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found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Appellants argue that neither Wiand nor Hammar teaches a method of making a plateau honing tool having an elongated mounting base, and an elongated projecting section which terminates in an elongated working face (main Brief, pages 9 and 10).

The examiner's position is that Wiand and Hammar disclose methods of making surface finishing tools and that all surface finishing tools are honing tools. (Answer, pages 7 and 10). The examiner relies upon a dictionary definition of the verb "hone" to establish that the words "a plateau honing tool" are broad enough to encompass the marble and stone polishing pad of Wiand and the abrasive dental articles of Hammar (first supplemental

Answer, page 2). We note, however, that the complete definition cited by the examiner reads "to sharpen or smooth with a whetstone" and that neither Wiand nor Hammar discusses the use of a whetstone. Thus, the definition cited by the

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examiner does not, in fact, support the examiner's position.

It is well established that the terms in a claim should be interpreted in a manner consistent with the specification and construed as those skilled in the art would construe them (In re Bond, 910 F.2d 831, 833, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990), Specialty Composites v. Cabot Corp., 845 F.2d 981, 986, 6 USPQ2d 1601, 1604 (Fed. Cir. 1988) and In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983)). After reviewing appellants' specification,² it is our determination that a more appropriate definition for the term "honing tool" as used in appellants' claims is "2: a tool for enlarging holes to precise tolerances and controlling finishes esp. of internal cylindrical surfaces by means of a mechanically rotated and

² We are informed at page 1 of appellants' specification that:

"[h]oning is used to correct hole geometry and also to prepare surfaces that require a specific finish or scratch pattern. Typical of the latter are piston bores or liners in internal combustion engines. On such oil lubricated moving part surfaces it is customary to provide what is known as a plateau finish. A plateau finish is similar to a conventional finish, except that the peaks have been removed or flattened out. The finish attempts to duplicate the finish after the engine has been broken in, and removes or smooths out metal that would otherwise be removed by piston rings."

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expanded abrasive."³ A "plateau honing tool" is, thus, a honing tool as defined, supra, capable of imparting a plateau finish to a workpiece surface. Here, we can think of no circumstances under which the artisan, consistent with the appellants' specification, would construe either the polishing pad of Wiand or the abrasive dental articles of Hammar as a "plateau honing tool."

We also disagree with the examiner's position that Wiand and Hammar each teach a method of making a "tool" having an elongated mounting base and an elongated projecting section which terminates in an elongated working face. The examiner's position is that the "elongated mounting base" reads on the planar sheet portion [12] and the "elongated projecting section" and "elongated working face" read on the projections 14 and working surface 18, respectively, of Wiand (Answer, page 9). As to Hammar, the examiner refers to the "polishing tip" illustrated in Figure 2 and reads the "elongated mounting base" on the portion

³ Webster's Third New International Dictionary of the English Language, Unabridged, G. & C. Merriam Co., Springfield, MA, 1971.

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[22], the "somewhat smaller elongated projecting section" as reading on the portion [28] and the "elongated working face" as reading on the end face of the portion [28] (id. at 10).

Wiand teaches an abrasive pad comprising a flexible one-piece abrasive sheet having a planar sheet portion [12] and a plurality of spaced apart abrasive protrusion [14] intimately molded with the planar sheet portion to form a one-piece sheet (col. 1, lines 11-18). Wiand informs us that such pads are commonly used on rotary polishers for polishing or finishing marble and stone surfaces (id. at 29-31). The illustrated embodiment is a circular pad having a central orifice [20] for fitting on a rotary tool (col. 2, lines 48-51). The method taught by the reference for making the abrasive pad includes melt mixing a thermoplastic material, such as, nylon with an abrasive grit and injecting the mixture into a mold where it is heated under pressure to form the one-piece sheet (col. 3, lines 46-68). Wiand also teaches a one-piece pad in which the backing sheet is abrasive-free. In this embodiment, the backing substrate or sheet [12] is first injection molded using an abrasive-free thermoplastic material and, thereafter, the thermoplastic-abrasive grit mix is injection molded onto

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the backing substrate

or sheet to form the abrasive protrusions (col. 4, line 67
through col. 5, line 12).

While we agree with the examiner that the method taught by
Wiand is highly relevant to the steps recited in claim 1
following

the word "comprising," we do not perceive any teaching in
Wiand of using the method taught therein to form a tool
having an elongated mounting base and a somewhat smaller
elongated projecting section which terminates in an elongated
working face. The only tool shape taught by the reference is
circular (see Figures 1, 5 and 6), not elongated.⁴

Hammar is concerned with abrasive dental articles,
including prophylactic cups, polishing wheels, points and
discs, made from a composition comprising abrasive particles
dispersed throughout and entrapped within a polyurea or

⁴ The adjective "elongated" is defined as "stretched out: Lengthened:
esp: having a form notably long in comparison to its width." Webster's Third
New International Dictionary of the English Language, Unabridged, G. & C.
Merriam Co., Springfield, MA, 1971. It would be normal usage to describe the
three-dimensional circular sheet represented in Wiand's Figure 1 as having a
diameter and a thickness, but not as having a length and width.

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polyurethane urea matrix (Abstract). Hammar also teaches that the disclosed dental articles may be made by liquid injection molding an abrasive particle-liquid mixture (col. 8, lines 10-29). The polishing tip [20] shown in Figure 2 does have portions [22] and [28] which can be reasonably described as "elongated." However, we do not find that the projecting section or portion [28] terminates in an elongated working face.

Since each and every element of claim 1 is not found in either Wiand or Hammar (RCA Corp. v. Applied Digital Data Sys., Inc., supra), the references do not anticipate claim 1. Therefore, we will not sustain the rejection of claim 1 under 35 U.S.C. § 102 based on Wiand or Hammar. Since claims 2, 8, 20 through 26, 30 and 31 are dependent on and include all limitations of claim 1, it follows that we will also not sustain the rejections of claims 2, 8, 20, 21, 26, 30 and 31 under 35 U.S.C. § 102 based on Wiand or the rejection of claims 2, 20 through 25 and 31 under 35 U.S.C. § 102 based on Hammar.

The obviousness issues

Claims 1 through 14, 20, 21 and 26 through 32 stand

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rejected under 35 U.S.C. § 103 as being unpatentable over Wiand alone or in combination with Pieper.

With respect to the rejection based on Wiand alone, it is the examiner's position that all of the elements of claim 1 are found in Wiand and that the features of dependent claims 2 through 14, 20, 21 and 26 through 32 are either well known in the art or matters of design choice (Answer, pages 5 and 6).

For the

reason set forth above, we have determined that each and every element of claim 1 is not found in Wiand. Our review of the reference further reveals that there is no suggestion of using the method disclosed therein to make a plateau honing tool having

an elongated mounting base and a somewhat smaller elongated projecting section which terminates in an elongated working face of the tool.

In order to establish the prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 985,

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180 USPQ 580, 583 (CCPA 1974). Since all the limitations of claim 1 are not taught or suggested by Wiand, the examiner has not established the prima facie obviousness of the claimed invention. Therefore, we will not sustain the standing 35 U.S.C. § 103 rejection of claims 1 through 14, 20, 21 and 26 through 32 based on Wiand alone.

The examiner has also rejected claims 1 through 14, 20, 21 and 26 through 32 under 35 U.S.C. § 103 as being unpatentable over Wiand in combination with Pieper. However, Pieper does not supply the deficiencies noted above with respect to Wiand. Since all of the claimed limitations in claims 1 through 14, 20, 21 and 26 through 32 would not have been suggested by the combined teachings of Wiand and Pieper, we will not sustain the standing 35 U.S.C. § 103 rejection of these claims based on Wiand and Pieper.

In summary, all of the examiner's rejections of claims 1 through 14 and 20 through 32 are reversed.

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REVERSED

IRWIN CHARLES COHEN)	
Administrative Patent Judge)	
)	
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)	BOARD OF PATENT
MURRIEL E. CRAWFORD)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
JOHN F. GONZALES)	
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