

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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte BERT KRIVEC, STEVEN R. WENTE and JEFFREY H. HOFF

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Appeal No. 2001-0099  
Application No. 09/042,431

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HEARD: MAY 15, 2001

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Before ABRAMS, McQUADE and BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 4, 5, 7-16 and 21, which are all of the claims pending in this application. Claims 17-20 were canceled subsequent to the final rejection (see Paper Nos. 9 and 10).

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BACKGROUND

The appellants' invention relates to ratchet wrenches and, more particularly, to ratchet wrenches with multi-position heads (specification, page 1). Claims 1 and 21 are exemplary of the invention and are reproduced in the appendix to appellants' brief.

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

Harrigan 1867	69,911	Oct. 15,
Davis 1916	1,182,652	May 9,
Packer 1936	2,060,523	Nov. 10,
Kentish 1955	2,705,897	Apr. 12,
Henson 1969	3,423,781	Jan. 28,
Inoue 1987	4,711,145	Dec. 8,
Glineur (British patent) 1927	273,914	Jul. 14,
Mesenhöller (European patent) 18, 1990 <sup>1</sup>	0,377,777	Jul.

The following rejections are before us for review.

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<sup>1</sup> An English language translation of this reference, prepared by the Patent and Trademark Office (PTO), is appended hereto.

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(1) Claims 1, 4, 8, 14 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mesenhöller in view of Kentish.

(2) Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mesenhöller in view of Kentish and either Harrigan or Davis.

(3) Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mesenhöller in view of Kentish and Inoue.

(4) Claims 13 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mesenhöller in view of Kentish and Glineur.

(5) Claims 5 and 7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mesenhöller in view of Kentish and either Henson or Packer.

(6) Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Mesenhöller in view of either Henson or Packer.

Reference is made to the brief and reply brief (Paper Nos. 12 and 15) and the answer (Paper No. 14) for the

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respective positions of the appellants and the examiner with regard to the merits of these rejections.

OPINION

In arriving at our decision on the obviousness issues raised in this appeal, we have given careful consideration to the appellants' specification and claims, the teachings of the applied prior art references, the Brekke declaration (Paper No. 9) supplied by appellants, and the respective positions articulated by appellants and the examiner. Having reviewed all of the evidence before us, we make the determinations which follow.

Turning first to the examiner's rejection of claim 1 as being unpatentable over Mesenhöller in view of Kentish, we note that Mesenhöller discloses a first ratchet wrench embodiment (Figures 1-5) having an operating head 3 pivotably coupled to a handle 2 including a handle shank 1 provided with two angular slots 16, 17 and a rod 9 disposed within a bore (guide channel 8) and joined to an annular slider 15 enclosing the handle shank by means of a diametral pin 14 passing through the slots. To change the angularity of the handle relative to the head, the user draws back the slider 15

axially against the force of a compression spring 19 to disengage a tab 12 on the end of the rod from a locking opening 13 on the head. In order not to have to hold the slider back continuously against the force of the spring 19, the slider 15 can be turned approximately 30 degrees to place the pin 14 in the locking position shown in Figure 5. The examiner recognizes that the retaining structure of Mesenhöller's first embodiment lacks a lock stem "having a terminal first end coupled to the rod and disposed in the first bore. Rather, both ends of the diametral pin 14 are outside the handle shank 1.

The retaining structure of Mesenhöller's second embodiment (Figures 8 and 9) differs from the first embodiment in that the tubular shank 36 contains an elongate slot 35, rather than two angular slots as in the first embodiment, and the slider 33 is not annular and is coupled to the rod 34 by a pin 14 which has only one end extending out from the rod. This second embodiment lacks a retaining slot communicating with the second slot end of the engagement slot (elongate slot 35), as called for in claim 1.

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Kentish discloses a ratchet wrench which is similar to the second embodiment of Mesenhöller, in that it includes a ratchet pin 12 slidably disposed in an axial bore 13 of a housing 2, with an elongated slot 16 provided in the housing and a pin 15 extending radially outward from one side of the ratchet pin 12 through the elongated slot 16 and secured in a thumb pad 18.

In rejecting claim 1, the examiner's position, as expressed on page 7 of the answer, is that

it would have been an obvious mechanical equivalent to form the engaging structure of Mesenhöller in the form as taught by Kentish since such structure performs substantially the same function, in substantially the same manner, to produce substantially the same results. Kentish [has] clearly teaches user engaging structure for sliding a rod to a release position to adjust a ratchet head to a variety of positions. The user engaging structure of Kentish has only one end of a pin which extends outwardly from the rod as claimed by appellant[s].

We understand the modification proposed by the examiner to be replacement of the ring or slider 15 and diametral (through) pin 14 of Mesenhöller's first embodiment with a button extending around only a small portion of the handle shank

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circumference and a pin extending from only one side of the rod.

While the examiner may be correct that the substitution of the button and pin arrangement taught by Kentish for that disclosed by Mesenhöller would perform substantially the same function in substantially the same manner to produce substantially the same results, thereby making the proposed modification feasible, the mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. See In re Mills, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). In this instance, the prior art discloses a slider ring and through pin arrangement in combination with two angular slots (Mesenhöller first embodiment) and a button and non-through pin arrangement in combination with a single elongate slot (Mesenhöller second embodiment and Kentish). We find nothing in the teachings of Mesenhöller and Kentish which would have suggested a button and non-through pin arrangement in combination with an angular slot (i.e., an engagement slot having first and second slot

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ends and a retaining slot communicating with the second slot end of the engagement slot), as recited in claim 1.

From our perspective, the only suggestion for putting the selected pieces from the references together in the manner proposed by the examiner is found in the luxury of hindsight accorded one who first viewed the appellants' disclosure. This, of course, is not a proper basis for a rejection. See In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). In light of the foregoing, we shall not sustain the examiner's rejection of claim 1, or claims 4, 8, 14 and 16 which depend therefrom, as being unpatentable over Mesenhöller in view of Kentish.

The deficiency in the combination of Mesenhöller and Kentish with respect to the subject matter recited in claim 1 finds no cure in the various references applied to support the obviousness rejections of the claims which respectively depend from claim 1. Accordingly, we also shall not sustain the examiner's rejections of claims 9 and 10 as being unpatentable over Mesenhöller in view of Kentish and Harrigan or Davis, claims 11 and 12 as being unpatentable over Mesenhöller in view of Kentish and Inoue, claims 13 and 15 as being

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unpatentable over Mesenhöller in view of Kentish and Glineur and claims 5 and 7 as being unpatentable over Mesenhöller in view of Kentish and Henson or Packer.

Independent claim 21, unlike claim 1, does not require that the lock stem have a terminal first end disposed in the first bore. Rather, with regard to the retaining structure, claim 21 recites

a lock stem coupled to the rod and axially movable in the engagement slot and receivable in the retaining slot to retain the rod in its non-engaged condition, wherein the engagement slot and the retaining slot respectively have central longitudinal planes inclined with respect to one another and forming an angle therebetween of less than 90°.

The examiner and appellants appear to be in agreement that Mesenhöller (first embodiment) meets all of the limitations of claim 21 with the exception of the angle of inclination of the central longitudinal planes of the engagement and retaining slots being less than 90°. With respect to the angle between the slots, the examiner notes that Henson and Packer disclose bayonet-type slots wherein the retaining slot is inclined with respect to the engagement slot by less than 90 degrees and appellants do not contest this

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assertion. The examiner contends that it would have been obvious to one having ordinary skill in the art to form the retaining slot of Mesenhöller such that it is inclined with respect to the engagement slot by less than 90 degrees to lock the connection as taught by Henson or Parker.

Appellants argue that neither Henson nor Parker is analogous prior art with respect to appellants' invention. For the reasons which follow, we do not agree.

The test for non-analogous art is first whether the art is within the field of the inventor's endeavor and, if not, whether it is reasonably pertinent to the problem with which the inventor was involved. In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979). A reference is reasonably pertinent if, even though it may be in a different field of endeavor, it logically would have commended itself to an inventor's attention in considering his problem because of the matter with which it deals. In re Clay, 966 F.2d 656, 659, 23 USPQ2d 1058, 1061 (Fed. Cir. 1992).

In this instance, appellants' invention addresses the problem of providing an improved locking arrangement between two telescoping members by providing engagement and retaining

slots in the outer member inclined with respect to one another at an angle of less than 90 degrees. Henson discloses the use of such an arrangement to securely lock the sleeve 20 of a mop head 12 in the sleeve 24 of a handle 10 and Packer discloses the use of such an arrangement to securely lock a beater rod 29 to a hollow drive shaft 23. One of ordinary skill in the art would have readily understood that the acute angle between the slots permits the biasing spring (32 in Henson, 51 in Packer) to aid in keeping the retaining pin in the locking position, thereby improving the locking. As Henson and Packer, like appellants' invention, are directed to the provision of a retaining and locking arrangement for fixing the position of telescoping sleeve members relative to one another, the teachings of either Henson or Packer would have commended themselves to the attention of the skilled artisan for use on a ratchet handle including an axially slidable locking rod disposed therein.<sup>2</sup> Further, the skilled artisan would have appreciated the advantages of furnishing such an

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<sup>2</sup> In cases such as this, involving relatively simple everyday-type mechanical concepts, it is reasonable to permit inquiry into other areas where one of even limited technical skill would be aware that similar problems exist. In re Heldt, 433 F.2d 808, 812, 167 USPQ 676, 679 (CCPA 1970).

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arrangement on the Mesenhöller ratchet handle shank 1 to provide a more secure locking of the slider 15 and pin 14 in the position shown in Figure 5.

In light of the above, we are satisfied that the combined teachings of Mesenhöller and either Henson or Packer are sufficient to establish a prima facie case of obviousness of the subject matter of claim 21.

Having concluded, for the reasons discussed above, that the teachings of the applied references are sufficient to establish a prima facie case of obviousness<sup>3</sup> of the subject matter of claim 21, we recognize that evidence of secondary considerations, such as the declaration of David Brekke presented by the appellants in this application, must be considered en route to an ultimate determination of obviousness or nonobviousness under 35 U.S.C. § 103.

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<sup>3</sup> Like the Court in In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992), we recognize that the concept of a "prima facie" case of obviousness is a procedural tool of patent examination which allocates the burdens of going forward as between the examiner and the appellants, and that the determinative issue regarding patentability in this, and any case based on obviousness, is whether the record as a whole, by a preponderance of the evidence with due consideration to persuasiveness of argument and secondary evidence, supports the legal conclusion that the invention claimed would have been obvious at the time the invention was made to a person having ordinary skill in the art.

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Accordingly, we consider anew the issue of obviousness under 35 U.S.C. § 103, carefully evaluating and weighing both the evidence relied upon by the examiner and the evidence provided by the appellants. See In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984) and Stratoflex Inc. v. Aeroquip Corp., 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983).

Appellants submitted the Brekke declaration as evidence of the commercial success of the appellants' claimed invention. The declaration states that, at the time of the declaration, Snap-on Tools Company (Snap-On) was selling flexible hand ratchet wrenches "substantially identical to those shown in Figures 1-7 of the present application ..., except that the central planes of engagement slot 140 and retainment slot 145 form an angle of about 90°." As of August 18, 1999, at least 37,176 Snap-on ratchet wrenches had been sold. Several dealers told declarant that they like the proximity of the lock button to the handle and the mechanism which allows the user to retain the locking teeth away from the ratchet head to allow adjustment of the angle of the head relative to the handle without removing the user's hand from

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the handle, as well as the secure locking of the wrench. The declarant states a belief that the noted sales demonstrate commercial success for the product and that the sales success is directly attributable to the claimed features of the lock button and retaining mechanism.

We conclude that the Brekke declaration does not persuasively establish commercial success of the claimed invention. In that regard, the declaration provides no data concerning whether the amount of sales of the Snap-on ratchet wrenches represents a substantial share in this market. Our reviewing court has noted in the past that evidence related solely to the number of units sold provides a very weak showing of commercial success, if any. See In re Huang, 100 F.3d 135, 137, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); Cable Elec. Prods., Inc. v. Genmark, Inc., 770 F.2d 1015, 1026-27, 226 USPQ 881, 888 (Fed. Cir. 1985) (finding that sales of 5 million units represent a minimal showing of commercial success because "[w]ithout further economic evidence ... it would be improper to infer that the reported sales represent a substantial share of any definable market"); see also In re Baxter Travenol Lab., 952 F.2d 388, 392, 21 USPQ2d 1281, 1285

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(Fed. Cir. 1991) ("[I]nformation solely on numbers of units sold is insufficient to establish commercial success.").

Even assuming that appellants had sufficiently demonstrated commercial success, that success is relevant in the obviousness context only if it is established that the sales were a direct result of the unique characteristics of the claimed invention, as opposed to other economic and commercial factors unrelated to the quality of the claimed subject matter. See Cable Elec., 770 F.2d at 1027, 226 USPQ at 888. Furthermore, it is well settled that evidence of nonobviousness must be commensurate in scope with the claims to which it pertains. In re Clemens, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980); In re Dill, 604 F.2d 1356, 1361, 202 USPQ 805, 808 (CCPA 1979) and In re Tiffin, 448 F.2d 791, 792, 171 USPQ 294, 294 (CCPA 1971). See also In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983).

The Snap-on ratchet wrench discussed in the Brekke declaration, wherein the central planes of the engagement and retaining slots form an angle of "about 90°," is not the ratchet wrench recited in appellants' claim 21, which recites that the central longitudinal planes of the slots form an

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angle therebetween of "less than 90°." Additionally, the Brekke declaration states that dealers specifically liked the proximity of the lock button to the handle, a feature which is not recited in claim 21. In light of the differences between the product sold and the subject matter of claim 21, we cannot conclude that the sales were a direct result of the unique characteristics of the claimed invention.

Moreover, evidence of secondary considerations, such as commercial success, is but a part of the "totality of the evidence" that is used to reach the ultimate conclusion of obviousness. See Richardson-Vicks Inc. v. Upjohn Co., 122 F.3d 1476, 1483, 44 USPQ2d 1181, 1187 (Fed. Cir. 1997).

After reviewing all of the evidence before us, including the totality of the appellants' evidence, it is our conclusion that, on balance, the evidence of nonobviousness fails to outweigh the evidence of obviousness discussed above and, accordingly, the subject matter of claim 21 would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103 at the time the appellants' invention was made. See Id.

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Accordingly, we shall sustain the examiner's rejection of claim 21.

REMAND TO THE EXAMINER

This application is remanded to the examiner to consider the patentability of the subject matter of claim 1, and any of the claims depending therefrom, in light of the disclosures of U.S. Pat. No. 5,943,924, issued to Jarvis on August 31, 1999 on an application filed June 18, 1997 (Jarvis '924) and U.S. Pat. No. 6,167,787, issued to Jarvis on January 2, 2001 on an application filed February 17, 1998 (Jarvis '787).<sup>4</sup> The Jarvis patents appear to disclose that which was found lacking, supra, in the combination of Mesenhöller and Kentish (i.e., a retaining slot communicating with one end of an engaging slot in the handle in combination with a lock stem having a first end coupled to the locking rod and disposed in the bore of the handle) with regard to the subject matter of claim 1.

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<sup>4</sup> The Jarvis patents were brought to the attention of this panel by appellants' counsel at the oral hearing. Copies of these patents are appended hereto.

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The examiner's attention is directed to column 7, lines 14-62, of Jarvis '924, as well as to Figure 52 of Jarvis '924, which appears to illustrate a retaining slot extending outwardly at a right angle from one end of an engagement slot. With regard to Jarvis '787, the examiner's attention is directed to the disclosure at column 4, line 3, to column 5, line 7, and Figures 6, 6A, 6B and 7.

#### CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 4, 5, 7-16 and 21 under 35 U.S.C. § 103 is affirmed as to claim 21 and reversed as to claims 1, 4, 5 and 7-16. Additionally, the application is remanded to the examiner for consideration of the issues noted above.

In addition to affirming the examiner's rejection of one or more claims, this decision contains a remand. 37 CFR § 1.196(e) provides that

Whenever a decision of the Board of Patent Appeals and Interferences includes or allows a remand, that decision shall not be considered a final decision. When appropriate, upon conclusion of proceedings on remand before the examiner, the Board of Patent Appeals and Interferences may enter an order otherwise making its decision final.

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Regarding any affirmed rejection, 37 CFR § 1.197(b)  
provides:

(b) Appellant may file a single request for  
rehearing within two months from the date of the  
original decision . . . .

The effective date of the affirmance is deferred until  
conclusion of the proceedings before the examiner unless, as a  
mere incident to the limited proceedings, the affirmed  
rejection is overcome. If the proceedings before the examiner  
do not result in allowance of the application, abandonment or  
a second appeal, this case should be returned to the Board of  
Patent Appeals and Interferences for final action on the  
affirmed rejections, including any timely request for  
rehearing thereof.

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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-IN-PART AND REMANDED

NEAL E. ABRAMS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
JOHN P. McQUADE	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
JENNIFER D. BAHR	)	
Administrative Patent Judge	)	

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