

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(2) is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HARVEY M. MAIN

Appeal No. 97-4208
Application 08/682,393¹

ON BRIEF

Before CALVERT, COHEN and NASE, Administrative Patent Judges.

CALVERT, Administrative Patent Judge.

¹ Application for patent filed July 17, 1996. According to appellant, the application is a continuation of Application 08/274,895, filed July 14, 1994, abandoned.

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DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 to 5, 9 to 13, 15, 17 to 25 and 27 to 44, all the claims remaining in the application.

The subject matter involved in this appeal is a ratchet wrench. The appealed claims are reproduced in Appendix A of appellant's brief.

The references applied in the final rejection are:

Flynn	3,733,936	May 22, 1973
Main et al. (Main '025)	4,128,025	Dec. 5, 1978
Main '940	4,218,940	Aug. 26, 1980
Gummow	4,406,186	Sept. 27, 1983

The appealed claims stand finally rejected as follows:

(1) Claims 1 to 5, 9 to 13, 15, 17 to 25 and 27 to 44, unpatentable for failure to comply with 35 U.S.C. § 112, first paragraph;

(2) Claims 1 to 3, 5, 9 to 13, 20 to 25, 28 to 36 and 40 to 43, unpatentable over Main '025 or '940 in view of Flynn, under 35 U.S.C. § 103;

(3) Claims 4 and 27, unpatentable over Main '025 or '940 in view of Flynn and Gummow under 35 U.S.C. § 103.

Rejection (1)

In the final rejection, the examiner indicated that the specification did not meet the enablement requirement of § 112, first paragraph, with regard to the subject matter recited in the claims, in that (final rejection, page 2)

[t]he specification and drawings show that the annular member (20) is adapted to engage a standard socket (12) which will in turn be applied to a "first workpiece", e.g. a nut(14). The claims state that the annular member (20), however is "operative to mate-ably [sic] engage the first workpiece" (claim 1) or a standard socket or the first workpiece (claim 24). Thus the scope of the claims is broader than the specification in that the drive stub 110 cannot directly engage the workpiece as is broadly claimed.

Also, there is no disclosed "resilient urging" of the shaft as claimed in claims 21 and 41.

In response to appellant's argument on pages 18 to 20 of the brief that it would require no undue effort for one of ordinary skill to construct the driver member integrally with the socket, so that the driver member would directly engage the first work-

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piece, the examiner seems to state on page 3 of the answer that the rejection is for lack of written description, i.e.:

Claims 1-5, 9-13, 15, 17-25 and 27-44 stand finally rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification

in such a way as to reasonably convey to one skilled in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

However, he then repeats the above-quoted language from the final rejection, and on pages 9 and 10 of the answer argues that the disclosure is not enabling because appellant's disclosed ejection mechanism 118 would be rendered inoperative if the socket were integral with driver member 20.

Since the examiner has referred to both written description and enablement, we note initially that these are separate and distinct requirements of the first paragraph of § 112. Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991). In the present case, regardless of the precise interpretation which may be placed on the recitation in claim 1 that the annular driver member is "operative to matably engage the first workpiece," there is a written description of this recitation in the application as filed, not only

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because claim 1 is an original claim, In re Armbruster, 512 F.2d 676, 678, 185 USPQ 152, 154 (CCPA 1975), but also because appellant employs the language of this recitation on page 7, lines 9 and 10 of the specification, and discloses on page 17, lines 13 to 18, that

the features and advantages of the ratchet wrench of the present invention can be applied to either a ratchet wrench adapted to directly engage the first workpiece or a ratchet wrench adapted for use with a conventional socket that engages the first workpiece.

With regard to the question of enablement, it is unnecessary to determine whether the appellant's and examiner's arguments concerning the construction of the driver member integrally with the socket are correct, because the language of claim 1 does not require such construction. The term "first workpiece" in claim 1 is broad enough to include socket 12, which, as disclosed, is engaged by driver member 20 and itself "can be rotatably advanced about a second workpiece," namely, can be rotated about bolt 16. Alternatively, since claim 1 does not require that the "annular driver member" be an integral member, this expression can be read on the disclosed combination of

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driver member 20 and releasably attached socket 12, the latter of which matably engages a "first workpiece" consisting of nut 14. There is no question that both of these interpretations of the claim language are enabled by appellant's disclosure.

The other independent claims, 24 and 44, both recite "an annular driver member operative to matably engage the conventional socket sized and adapted to matably engage the first workpiece." The examiner seems to interpret the antecedent of the expression "sized and adapted" as the "annular driver member," but it is evident, particularly when read in light of the disclosure at page 18, lines 13 to 15, that it is the "conventional socket" which is "sized and adapted to matably engage the first workpiece." Such engagement is clearly enabled by appellant's disclosure.

The appellant has not responded to the examiner's rejection of claims 21 and 41 concerning non-enablement of the "resiliently urging" limitation. Rejection (1) will therefore be sustained as to those claims.

Accordingly, rejection (1) will be sustained as to claims 21 and 41, but not as to claims 1 to 5, 9 to 13, 15, 17 to 20, 22 to 25, 27 to 40 and 42 to 44.

Rejection (2)

Considering this rejection as to claim 1, the appellant does not contend that the combination of Main '025 or '940 and Flynn would not have been obvious, but rather contends that the combination would not meet all the limitations of claim 1. The

issue comes down to whether Main '025 discloses² the following claimed limitations (emphasis added):

(a) an annular driver member . . . having . . . a plurality of end teeth disposed circumferentially about and extending from an annular flat surface of said annular driver member parallel to an axis of rotation of said annular driver member; [and]

(b) a pawl element having . . . a pair of nibs, . . . said nibs projecting from a flat surface of said pawl element and extending parallel to a pivotal axis of said pawl element.

Appellant first argues that the "flat surface" limitations of parts (a) and (b) are not met because Main '025 discloses concave, not flat, surfaces on annular driver 18 and

² Since the relevant portions of the ratchet wrench disclosed in Main '940 are essentially the same as in Main '025, we will confine our discussion to the latter reference.

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pawl element 30 from which teeth 26 and 36, respectively, project. However, as the examiner points out, Main '025 discloses at column 5, lines 18 to 20, that the wrench may use straight gears as opposed to bevel gears. If the straight gears suggested by Main '025 were used, then the surfaces of driver member 18 and pawl element 30 from which the gear teeth 26, 36, extend would be flat, and would correspond to the flat surfaces called for by parts (a) and (b) of claim 1.

Appellant's other argument with regard to claim 1 is that Main '025 does not disclose the "nibs" recited in part (b). The examiner takes the position that these are readable on the teeth 36 of Main's pawl 32.

It is fundamental that, during prosecution before the PTO, the pending claims must be interpreted as broadly as their terms reasonably allow, In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), and that

as an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.

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In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1977).

Appellant, citing a definition of "nib" from the American Heritage Dictionary of the English Language,³ contends that Main's gear teeth are not "nibs" because they are not sharp. The examiner on the other hand notes that Webster's Seventh New Collegiate Dictionary defines "nib" as "a small pointed or projecting part" (emphasis added), and asserts that gear teeth 36 of Main '025 are projecting parts, and therefore are nibs, as claimed.

We agree with the examiner. Looking to appellant's disclosure for any enlightenment on this question, In re Morris, supra, we note, as did the examiner, that the nibs 42, 44 shown in appellant's drawings (Figs. 12 and 13) have blunt, rather than pointed, ends. Accordingly therefore, the term "nib" as used in the claims cannot be accorded the definition cited by appellant, but must be used in the broader sense of "a small projecting part," which definition also reads on a gear tooth such as those disclosed on the pawl 30 of Main '025.

³ "any small, sharp projecting part"

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Appellant further argues that his structure is simplified over that of Main, because he employs only a pair of nibs rather than Main's numerous gear teeth. However, the claims do not exclude the presence of other gear teeth ("nibs") in addition to the pair of nibs recited.

Accordingly, we will sustain the rejection of claim 1 under 35 U.S.C. § 103, and likewise the rejection of claims 2, 5, 9, 10, 12, 13 and 20 to 23, which, appellant states on page 9 of the brief, fall with claim 1.

Claims 3 and 24 each include the limitation that the peripheral length of each peripheral tooth on the driver member is equal to the length of the shoulders on the pawl element. These lengths are identified in the specification as " h_a " and " h_s ," respectively, and it is disclosed that making these dimensions equal increases the mechanical strength of the wrench (page 22, lines 4 to 12).

The examiner asserts that this feature is suggested by Flynn, but does not identify, and we do not find, any written disclosure thereof in the reference. Presumably the examiner is referring to Flynn's drawings, which show in Figs. 1 and 5 a driver member 25 or 125 whose peripheral teeth 26 or 126 are of the same thickness (length) as those of pawl 27 or 127. However,

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we do not consider that this showing, without more, would have suggested to one of ordinary skill in the art that the driver member and/or pawl element of Main '025 or '940 be modified to make their teeth of equal peripheral length. This is not merely a matter of design choice, but solves appellant's stated problem of increasing the strength of the wrench. Cf. In re Kuhle, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975).

We will therefore not sustain the rejection of claims 3 and 24, nor the rejection of claims 25 and 28 to 43, dependent on claim 24.⁴

Claims 11 (and 33) recite that

said second end portion of said drive shaft includes a disk element disposed between said first and second gears and wherein said pawl element includes a pair of locating pins spaced apart from one another and extending parallel to said pair of nibs, said locating pins operative to contact said disk element to restrict linear movement of said drive shaft when said first end portion of said drive shaft is moved from the first linear position to the second linear position.

Main '025 does not disclose any pins operative to contact the disk element 58 on drive shaft 52, but the examiner contends

⁴ Appellant states on page 9 of the brief that claim 33 "stand[s] alone," but since it is dependent on claim 24, it necessarily is patentable over the applied prior art if claim 24 is.

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(answer, page 8) that the pins are the "full structural and functional equivalent" of the wall 44 on pawl 30 of Main '025.

We will not sustain this rejection. It is questionable to us whether a wall is the structural equivalent of pins, but even if it is, the mere existence of structural and functional

equivalence does not establish obviousness. In re Flint, 330 F.2d 363, 367, 141 USPQ 299, 302 (CCPA 1964). The examiner has presented no evidence and/or reasons as to why it would have been obvious to one of ordinary skill in the art to employ locating pins, as claimed, in the wrench of Main '025.

The rejection of claim 11 will accordingly not be sustained.

Rejection (3)

The examiner takes the position that the apparatus recited in claims 4 and 27 would have been obvious over Main '025 or '940 in view of Flynn, further in view of Gummow. Since (i) we have held above that claim 24 is not unpatentable over Main '025 or '940 in view of Flynn, (ii) claim 27 is dependent on claim 24, and (iii) Gummow does not supply the deficiency noted

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with regard to the other references, the rejection of claim 27 will not be sustained. Our discussion of rejection (3) will therefore be limited to claim 4.

The examiner's position is summarized in the following quotation from page 7 of the answer (original emphasis):

Both Main devices show the use of a spring biased pin [46 of Main '025] instead of a ball, however it is well known in the ratchet wrench art, as clearly evidenced by Gummow, that a spring biased ball can also be used in

exactly the same manner for exactly the same purpose. Thus one skilled in the art would find it obvious to use either a pin or ball, as desired, to function as a detent mechanism for a ratchet pawl. The second point is that the placement of the spring and ball is on the pawl and not on the body of the tool, however this is merely an obvious reversal of position of the elements without any change in the structure or function of these elements and one skilled in the art would find it obvious to make such a reversal of position without effecting [sic: affecting] the overall function of the wrench.

We do not consider this position to be well taken.

Gummow discloses a simple ball-type detent 152 which merely serves to retain the pawl 146 in whatever position it is turned to by selector 118 (col. 5, lines 42 to 65). The spring member 46 of Main '025, on the other hand, acts as an over-center switch

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to urge the pawl in one direction or the other (col. 3, lines 54 to 59). Thus, contrary to the examiner's statement, the ball detent of Gummow, whether located on the pawl or on the wall of the housing, could not be used in exactly the same manner for exactly the same purpose as Main's spring loaded pin 46, and we perceive no basis for concluding that one of ordinary skill would have been motivated to substitute the former for the latter.

The rejection of claim 4 will not be sustained.

Conclusion

The examiner's decision to reject the appealed claims under 35 U.S.C. § 112, first paragraph, is affirmed as to claims 21 and 41, and reversed as to claims 1 to 5, 9 to 13, 15, 17 to 20, 22 to 25, 27 to 40 and 42 to 44. His decision to reject the appealed claims under 35 U.S.C. § 103 is affirmed as to claims 1, 2, 5, 9, 10, 12, 13 and 20 to 23, and is reversed as to claims 3, 4, 11, 24, 25 and 27 to 43.

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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

IAN A. CALVERT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
IRWIN CHARLES COHEN)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
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