

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte TRUMAN COLLINS

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Appeal No. 2001-2595  
Application 09/245,640

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ON BRIEF

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

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 3, 19, 20, 22 through 24, 26 through 30 and 33. Claim 2 stands allowed. Claims 4 through 12, 14 through 18, 21, 25, 31 and 32, the only other claims remaining in the application, have been withdrawn from consideration by the examiner as being directed to non-elected species. Claim 13 has been canceled.

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As noted on page 2 of the specification, the primary object of appellant's invention is to provide a versatile vise jaw reconfigurable to secure a variety of shapes and sizes of work pieces in an advantageous orientation. Independent claim 1 is representative of the subject matter on appeal, and a copy of that claim, reproduced from the Appendix to appellant's brief, is attached hereto.

The prior art references of record relied upon by the examiner are:

Peterson	2,754,708	Jul. 17, 1956
Hennessey	3,463,478	Aug. 26, 1969
Meyer	4,157,819	Jun. 12, 1979
Swann et al. (Swann)	5,535,995	Jul. 16, 1996

Claims 1, 19, 22, 27 through 29 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer.

Claims 3, 20, 24, 26 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer as applied above, and further in view of Peterson.

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Claim 23 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer as applied to claims 1, 19 and 22 above and further in view of Swann.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we refer to the examiner's answer (Paper No. 15, mailed June 11, 2001) and to appellant's brief (Paper No. 12, filed January 25, 2001) for a full exposition thereof.

#### OPINION

Having carefully reviewed the obviousness issues raised in this appeal in light of the record before us, we have made the determinations which follow.

Looking first to the examiner's rejection of claims 1, 19, 22, 27 through 29 and 33 under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer, we note that the examiner has determined (answer, page 4) that Hennessey discloses a pair of opposing vise jaw plates (e.g., Fig. 10) with a pattern of holes (26, 27) on the plates for receiving work piece holders

(P). What the examiner finds lacking in this reference relative to appellant's claimed subject matter (e.g., claim 1) is that the holes in the plates are not equally spaced. To account for this difference, the examiner turns to the adjustable work piece clamping apparatus of Meyer, noting that this patent discloses a plate (2) with an array of regular spaced holes for receiving work piece holders for clamping and holding a work piece. From the collective teachings of the applied patents, the examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of appellant's invention to make the hole pattern on the jaw plates of Hennessey in the manner taught by Meyer, i.e., as an array of regularly spaced holes, in order to enable the user to have more possibilities of work holder positioning on the jaw plates.

The crux of appellant's argument is that the examiner's reliance on Meyer for the teaching of a pattern of regularly spaced holes is an improper inference on the examiner's part, without support from Meyer's specification. In particular, appellant contends that there is no basis for assuming that Meyer's nearest-neighbor holes are equidistant. We do not agree.

Like the examiner (answer, pages 5-7), we are of the opinion that Meyer both shows and expressly discloses a uniform orthogonal pattern of same-sized plate holes aligned in rows and columns, with the holes regularly spaced apart an equal distance one from the other. Note particularly, the grid pattern (6) shown in Figures 1, 5, 8, 13 and 15 of Meyer, and the disclosure in the paragraph bridging columns 4 and 5 of the patent, wherein it is specifically indicated that a hole pattern useful for most wood-working operations is achieved by providing a grid of openings (4) "on two-inch centers." Thus, appellant's argument on pages 5-6 of the brief regarding equal spacing of the holes of the grid in Meyer does not persuade us of any error in the examiner's position.

Appellant next attacks the examiner's rejection by urging (brief, page 7) that substituting a single workbench table top for Hennessey's pair of plates is nonsensical. We would certainly agree. However, it is abundantly clear from the record that the examiner has made no such assertion in rejecting the claims on appeal, but has merely relied upon Meyer's teaching of

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a regular spaced hole pattern for supporting work piece holders as being equally useful in the environment of Hennessey's vise-type clamping apparatus, a position we wholeheartedly agree with.

As for appellant's assertions that one skilled in the art of vise plates would not look to a workbench to improve his plates, and that the examiner has employed hindsight in the proposed combination of Hennessey and Meyer, we find such arguments to be unpersuasive. In the first place, appellant has not provided a cogent explanation of exactly why one skilled in the art of vise plates would not look to a clamping workbench like that of Meyer to improve his vise plates. Moreover, like appellant, both Hennessey and Meyer disclose a work piece clamping and positioning device which depends upon the exact positioning of work holders mounted in holes of a work surface for holding a work piece in a precisely selected position with reference to an operating tool. Like appellant, both of the applied patents also seek to provide such a system that is quick and simple to use and thus minimizes the skill required and errors in work set up, while allowing the work holders to be quickly and easily reoriented for another operation, removed quickly to provide an

unobstructed work surface, or reset in exactly the same location for repetitive operations. Thus, we conclude that, at the very least, the adjustable work piece clamping system of Meyer is reasonably related to both appellant's and Hennessey's problem of securing a variety of shapes and sizes of work pieces in an advantageous orientation, and for that reason is clearly analogous prior art.

As for appellant's hindsight argument, we agree with the examiner that the increased flexibility and capability of holding any size or shape work piece firmly in a fixed position as disclosed in Meyer would have provided ample motivation for one of ordinary skill in the art to utilize the expanded grid of uniformly spaced holes disclosed in Meyer in the vise plates of Hennessey for the self-evident advantages to be derived therefrom. In that regard, Hennessey notes (col. 2, lines 50-57) that the holes in the vise plates therein may be "spaced apart variously according to the class of work which may be expected" and because of the simplicity of the device, that it would be "a practical matter to provide a substantial number of these blocks having holes differently arranged." As for Meyer, this patent indicates (col. 9, lines 33-39) that the clamping system

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disclosed therein "may be adapted to almost any home or industrial work surface simply by providing it with a grid of openings," which openings receive pins attaching clamping members to the work surface or may receive pins attaching other structures to the work surface.

In further response to appellant's arguments concerning the examiner's combination of the applied references, we observe that where the issue is one of obviousness under 35 U.S.C. § 103, the proper inquiry should not be limited to the specific structure shown by a reference, but should be into the concepts fairly contained therein, with the overriding question to be determined being whether those concepts would have suggested to one skilled in the art the modification called for by the claims. See In re Bascom, 230 F.2d 612, 614, 109 USPQ 98, 100 (CCPA 1956). Furthermore, under 35 U.S.C. § 103, a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests (In re Burckel, 592 F.2d 1175, 1179, 201 USPQ 67, 70 (CCPA 1979); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976)), as well as the reasonable inferences which the artisan would logically draw from the reference. See

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In re Shepard, 219 F.2d 194, 197, 138 USPQ 148, 150 (CCPA 1963).

As stated by the Court in In re Keller, 642 F.2d 413, 425, 208  
USPQ 871, 881 (CCPA 1981)

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.

In addition, while there clearly must be some teaching or suggestion to combine existing elements in the prior art to arrive at the claimed invention, we note that it is not necessary that such teaching or suggestion be found only within the four corners of the applied references themselves; a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. See In re Boezk, 816 F.2d 1567, 1572, 163 USPQ 545, 549 (CCPA 1969). This is because we presume skill on the part of the artisan, rather than the converse. See In re Sovish, 769 F.2d 7638, 743, 226 USPQ 771, 774 (Fed. Cir 1985).

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Since appellant's arguments have not convinced us of any error in the examiner's position regarding the rejection of independent claims 1 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer, we will sustain the rejection of those claims. In addition, since appellant has not specifically argued for the separate patentability of claims 19, 22, 27, 29 and 33, we conclude that those claims will fall with their respective independent claim. See, 37 CFR § 1.192 (c) (7) and (c) (8) (iv) and In re Nielson, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987); In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978); In re Hellsund, 474 F.2d 1307, 1312, 177 USPQ 170, 174 (CCPA 1973).

Regarding the examiner's rejection of dependent claims 3, 20, 24, 26 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer as applied above, and further in view of Peterson, we look first to claim 3. This claim sets forth that the work piece holder or holders of claim 1 are "selected from a collection of work piece holders comprising an arc block, a dowel, and a V-block." Since Hennessey clearly discloses a work holder in the form of dowels (P) and Meyer discloses a bench stop (Fig. 11) that we broadly consider to be a

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V-block (at 114), we share the examiner's view that the subject matter of claim 3 on appeal would have been obvious to one of ordinary skill in the art at the time of appellant's invention. Thus, we will sustain the examiner's rejection of claim 3 under 35 U.S.C. § 103(a).

As for the examiner's rejection of claims 20, 24, 26 and 30 under 35 U.S.C. § 103(a), we agree with appellant's arguments on pages 8 and 9 of the brief that there would be no logical reason for one of ordinary skill in the art to attempt to modify the pins or dowels (P) of Hennessey to have a rounded surface on the outer end thereof as in the pins of the vise in Peterson, since the pins of these two patents operate in entirely different ways to hold a work piece in position between the vise jaws. Note particularly Figures 5, 6, 7, 8, 9 and 10 of Hennessey and Figures 1, 2, 4 and 5 of Peterson. Moreover, we note that each of claims 20, 24, 26 and 30 includes reference to an "arc block" like that seen in Figures 7 and 8 of appellant's drawings. No such "arc block" is shown or disclosed in Hennessey, Meyer or Peterson. Accordingly, the examiner's rejection of claims 20, 24, 26 and 30 under 35 U.S.C. § 103(a) will not be sustained.

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The last of the examiner's rejections for our review is that of claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer and Swann. According to the examiner, it would have been obvious to one of ordinary skill in the art at the time of appellant's invention to make the apertures or holes in the vise plates of Hennessey as modified by Meyer to have both an unthreaded portion and a threaded portion as shown in Swann (Figs. 2 and 7) in order to permit Hennessey's holes to be selectively engaged by work holders having either threaded or unthreaded posts. We agree.

Appellant's argument relative to claim 23 (brief, page 9) is that the holes seen in Swann are not "stepped" holes as described by appellant. On page 8 of the answer, the examiner points to Figure 7 of Swann and notes that this figure clearly shows a stepped hole having an unthreaded portion (36) and a threaded portion (34), wherein the hole is specifically designed to receive two different types of pins. Since we agree with the examiner's evaluation of the teachings of Swann and with his conclusion of obviousness, we will sustain the rejection of claim 23 under 35 U.S.C. § 103(a).

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In light of the foregoing, the decision of the examiner rejecting claims 1, 19, 22, 27 through 29 and 33 under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer is sustained. The examiner's decision rejecting claims 3, 20, 24, 26 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer and Peterson, is sustained as to claim 3, but not with regard to claims 20, 24, 26 and 30. The examiner's decision rejecting claim 23 under 35 U.S.C. § 103(a) as being unpatentable over Hennessey in view of Meyer and Swann is also sustained.

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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

NEAL E. ABRAMS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
JEFFREY V. NASE	)	
Administrative Patent Judge	)	

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APPENDIX

1. A versatile vise jaw mountable to a vise, the improvement comprising

a pair of opposing jaw plates, at least one of said jaw plates having a uniform orthogonal pattern of same-sized plate holes, the plate holes being aligned in rows and columns with each hole center respectively spaced apart a same distance,  $d$ , from its nearest holes both in its respective row and in its respective column adapted to receive two posts of a work piece holder in two of said nearest holes, each post matching a plate hole with post centers spaced apart said same distance,  $d$ , and,

means for mounting said jaw plates to a vise.