

**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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* BRIAN E. FITZGERALD, DONALD F. LIENERT  
and RONALD J. PASCUCCI

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Appeal No. 96-0814  
Application 08/066,331<sup>1</sup>

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ON BRIEF

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Before MEISTER, ABRAMS and STAAB, *Administrative Patent Judges*.  
STAAB, *Administrative Patent Judge*.

**DECISION ON APPEAL**

This is an appeal from the examiner's final rejection of claims 1, 4-6, 9 and 10. These constitute all the claims remaining in the application. We *affirm-in-part*.

Appellants' invention pertains to a method of using the spindle of a machine tool to move a rotary fixture to any of a

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<sup>1</sup>Application for patent filed May 24, 1993. According to appellants, this application is a continuation of Application 07/917,833 filed July 21, 1992, now abandoned.

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number of angular positions relative to a work table. Claim 1, the sole independent claim on appeal, is illustrative of the appealed subject matter and reads as follows:

1. A method of using a numerically-controlled machine tool to move a rotary fixture from a first angular position to a second angular position, said machine tool having a spindle, comprising the steps of:

providing a rotary fixture;

providing a body;

mounting said fixture on said body for rotational movement about an axis;

providing a frictional locking mechanism between said body and fixture;

providing a member;

mounting said member in said spindle;

moving said spindle so as to cause said member to directly and positively engage said fixture at a location eccentric to said axis in order to hold said fixture at said first angular position;

releasing said frictional locking mechanism;

operating said machine tool to selectively move said member relative to said axis while said member is engaged with said fixture to move said fixture from said first position to said second position and to hold said fixture at said second position;

re-engaging said frictional locking mechanism; and

withdrawing said member from engagement with said fixture[;]

thereby to rotate said fixture about said axis from said first angular position to said second angular position.

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No references are relied upon by the examiner in support of the rejection.

Claims 1, 4-6, 9 and 10 stand rejected under 35 U.S.C. § 112, first paragraph, as being based on a disclosure that fails to adequately teach how to make and use the invention, i.e., fails to provide an enabling disclosure. The examiner states:

. . . [T]he specification fails to describe the structure of the locking mechanism in sufficient detail such that one of ordinary skill in the art can make and/or use the invention. The structural relationship between the locking mechanism and the body is not sufficiently clear to adequately teach one of ordinary skill in the art how to make and/or use the invention.  
[answer, page 3]

In responding to appellants' arguments, the examiner adds the following comments:

Because the examiner is personally unaware of any locking mechanism which functions as does Appellant's [sic, Appellants'] and because the examiner has been unable in his search to uncover any references which disclose a locking mechanism which functions as does Appellant's [sic] and because Appellant [sic] has provided no evidence to demonstrate that one having ordinary skill in the art would have found the locking mechanism for practicing the claimed locking steps to be obvious, the specification fails to provide an enabling disclosure.

. . . [W]hile . . . the specification may explain the general functional relationship between the locking mechanism and the body, they fail to demonstrate to one having ordinary skill in the art how to obtain this functional relationship. That is, the structure of the locking mechanism contained within body 25 is not clear or obvious from these portions of the specification.

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Thus, the specification is non-enabling. [answer, page 5]

The dispositive issue with regard to the enablement requirement found in the first paragraph of 35 U.S.C. § 112 is whether the appellants' disclosure, considering the level of ordinary skill in the art as of the date of the appellants' application, would have enabled a person of such skill to make and use the claimed invention without undue experimentation. *In re Strahilevitz*, 668 F.2d 1229, 1232, 212 USPQ 561, 563-64 (CCPA 1982). The amount of experimentation required, in addition to not being undue, must not require ingenuity beyond that expected of one of ordinary skill in the art. *In re Angstadt*, 537 F.2d 498, 504, 190 USPQ 214, 218 (CCPA 1976). The examiner has the initial burden of producing reasons that substantiate a rejection based on a lack of enablement. *In re Strahilevitz*, 668 F.2d at 1232, 212 USPQ at 563 (CCPA 1982) and *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). Once this is done, the burden shifts to the appellants to rebut this conclusion by presenting evidence to prove that the disclosure is enabling. *In re Doyle*, 482 F.2d 1385, 1392, 179 USPQ 227, 232 (CCPA 1973), *cert. denied*, 416 U.S. 935 (1974) and *In re Eynde*, 480 F.2d 1364, 1370, 178 USPQ 470, 474 (CCPA 1973).

The disclosed device, in pertinent part, includes a body 25 having a fixture 26 mounted thereon for rotational movement about an axis x-x. The examiner's criticism of the claims centers on the frictional locking mechanism for preventing rotation of the fixture 26 relative to the body 25. The specification describes the operation of the locking mechanism as follows:

. . . A locking mechanism (not shown), is located within body 25 around the horizontal shaft. Thus, this clamp-like mechanism acts as a brake to frictionally engage and hold the fixture in any angular position relative to the body. More particularly, this locking mechanism is shown as including a dogleg-shaped intermediately-pivoted lever 31 mounted on the crank arm. The upper marginal end portion of the lever 31 is aligned with crank arm hole 30, and is arranged to be selectively engaged by the distal end face of pin 23, when pin 23 is selectively inserted into hole 30. The other marginal end portion of lever 31 is arranged to release the locking mechanism.

. . . . When pin 23 is inserted into hole 30, it will engage lever 31, and disengage the locking mechanism, thereby allowing the fixture to rotate relative to the body. The pin is then moved through a circular arc about axis x-x to move the fixture from the first angular position to a second angular position. Thereafter, the pin is withdrawn from hole 30. When this occurs, the locking mechanism reengages to tightly and securely hold the fixture in the new angular position relative to the body. [specification, page 4-5]

In the present instance, the examiner appears to have no difficulty in understanding how the pin 23 engages the upper marginal end portion of the dogleg-shaped lever 31 to move the

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lever when the pin 23 is moved into the hole 30 in the crank arm. Rather, the examiner seems to be of the view that the disclosure is not enabling because one of ordinary skill in the art would not know how to make a frictional locking mechanism that utilizes the resulting movement of the lever to release the locking mechanism. Although appellants' disclosure does not specifically set forth the construction of the frictional locking mechanism, nor how it would cooperate with the dogleg-lever 31 to allow for release of the locking mechanism when the pin engages the upper end of the lever, such details would appear to be a rather simple and straightforward matter. The examiner has not advanced any reason, nor is any apparent, why a person of ordinary skill in the art, as of the date of appellants' application, would not have been able to practice the method of independent claim 1, and claims 4-6 and 9 which depend therefrom without undue experimentation, and in particular the steps of releasing and re-engaging the frictional locking mechanism as called for in claim 1, and the step of unlocking the fixture as a function of the axial position of the lug, as called for in dependent claim 9. Accordingly, we will not sustain the standing 35 U.S.C. § 112, first paragraph, rejection of claims 1, 4-6 and 9.

We reach an opposite conclusion with respect to dependent claim 10, which requires that the fixture "is unlocked as a function of fluid pressure." The only reference in the disclosure to this aspect of the invention is found in the first full paragraph on page 5 of the specification, which reads as follows:

Fig. 1 depicts an alternative form of the crank arm, generally indicated at 29', which is provided with a slot bounded by facing parallel side wall surfaces 30', 30'. Thus, pin 23 is adapted to be selectively received in this slot. Linear motion of pin 23 will produce corresponding rotational movement of fixture 26 about axis x-x. *In other forms, the fluid pressure of a coolant flow discharge may be used to selectively engage and discharge the clamping mechanism.* [emphasis added]

We are at a loss as to how the fixture 26 "is to be unlocked as a function of fluid pressure," as called for in claim 10, especially when claim 10 is read in light of the specification, which indicates that the fluid pressure in question is "a coolant flow discharge," and in light of the fact that appellants' disclosure provides no further explanation or illustration whatsoever of precisely how fluid pressure is to be used to effect unlocking of the clamping device.<sup>2</sup> The statement on page

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<sup>2</sup>This is in contrast to the mechanically released locking mechanism embodiment discussed *supra*, wherein portions of the release mechanism, i.e., the dogleg-shaped lever 31, are

2 of the main brief that the problem with prior art fixtures that provide electrical and/or hydraulic connections to the fixture mounted on the movable work table is that "[s]uch hoses and wires can interfere with the machining operation," and the statement on page 3 of the main brief that "[a]pplicants' mechanism avoids any hoses or electrical connections to the mechanism mounted on the work table of the machine tool" (main brief, page 3) only serves to add to our uncertainty. While we appreciate that enablement is determined through the eyes of a person of ordinary skill in the art, and that a certain amount of experimentation may be required, in our opinion the amount of experimentation required to practice the method of dependent claim 10 would require ingenuity well beyond that expected of the ordinarily skilled artisan.

Appellants have not specifically addressed claim 10, instead contending that "if the disclosure is 'enabling' with respect to independent claim 1, it will likely be similarly 'enabling' with respect to dependent claims 4-6 and 9-10" (main brief, page 5). We do not agree. In our view, the examiner's concerns regarding enablement are justified with respect to claim 10. In that

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illustrated in the drawings, and where the cooperation between the pin 23 and the end portion of the lever 31 is explained in the specification.

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appellants have presented no convincing argument or evidence supporting enablement of the subject matter of claim 10, we will sustain the standing 35 U.S.C. § 112, first paragraph, rejection of this dependent claim.

In summary, the examiner's decision to reject claims 1, 4-6, 9 and 10 under 35 U.S.C. § 112, first paragraph, is reversed as to claims 1, 4-6 and 9, but is affirmed as to claim 10.

The decision of the examiner is affirmed-in-part.

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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**

JAMES M. MEISTER	)	
Administrative Patent Judge)	)	
	)	
	)	
NEAL E. ABRAMS	)	BOARD OF PATENT
Administrative Patent Judge)	)	APPEALS AND
	)	INTERFERENCES
	)	
LAWRENCE J. STAAB	)	
Administrative Patent Judge)	)	

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