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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM Q. TINGLEY III, WILLIAM Q. TINGLEY,
and DANIEL R. BRADLEY

Appeal 2019-002786
Application 14/638,547
Technology Center 3700

Before STEFAN STAICOVICI, CHARLES N. GREENHUT, and
MICHAEL J. FITZPATRICK, *Administrative Patent Judges*.

GREENHUT, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1, 3, and 4. *See* Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Tennine Corp. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to a method and apparatus for non-rotary holemaking by means of controlled fracturing. Claim 4, reproduced below, is illustrative of the claimed subject matter:

4. A multi-axis holemaking machine using a method for producing a through-hole using the process of controlled fracturing, where the machine includes a base section for supporting a workpiece; a bridge section for holding at least one machine tool; and wherein the multi-axis machine creates a hole in plastic and metal materials using a non-rotary machining process comprising the steps of:

 fixturing a workpiece to a table of a non-rotary holemaking machine tool such that no die is used;

 fixturing the cutting tool to the column of the machine tool;

 positioning a face of the cutting tool perpendicular to a centerline of a proposed hole;

 approaching the surface of the workpiece with the cutting tool to a predetermined clearance level;

 providing an impact force of at least 20,000 lbs/sq-in to impact the location of a proposed hole in the workpiece;

 driving the cutting tool into the workpiece through the use of controlled fracturing by exceeding both the yield strength and the breaking strength of the workpiece material in a manner so to cause fracturing by adiabatic shear banding produced by the impact force;

 creating a plurality of adiabatic shear bands to emanate from the face of the cutting tool using the impact force of the cutting tool;

 forming connecting cracks using the plurality of adiabatic shear bands;

 forming a slug in the workpiece at the position of the hole using the force of the cutting tool such that a through-hole in the workpiece is formed at the position of the slug without a counterstrike, die or other counter-tool used on the opposite side of the workpiece to create the through-hole of a desired size and shape at the predetermined clearance level.

REFERENCES CITED

Name	Reference	Date
Hekman	US 4,860,419	Aug. 29, 1989
Schäfer	US 5,460,026	Oct. 24, 1995
Shah	US 5,666,840	Sep. 16, 1997
Julian	US 5,669,866	Sep. 23, 1997
Someno	US 6,581,269 B2	June 24, 2003

REJECTIONS

Claims 1, 3, and 4 are rejected under 35 U.S.C. § 112(a) as failing to comply with the enablement requirement. Final Act. 2.

Claims 1, 3, and 4² are rejected under 35 U.S.C. § 112(b) as being indefinite. Final Act. 3.

Claims 1, 3, and 4 are rejected under 35 U.S.C. § 103 as being unpatentable over Julian, Schafer, and Someno.³ Final Act. 6.

² In the body of the rejection under § 112(b) the Examiner includes a subheading “**Claims 1, 3 and 4.**” Final Act. 4. The paragraph that follows describes a problem common to claims 1, 3, and 4 and mentions all three claims by number. Final Act. 5. Thus, we understand claim 4 to be inadvertently omitted from the rejection statement. In response to this paragraph Appellant argues, “[i]f the Examiner's point is that function language makes the claims indefinite, then he has not clear made this rejection clear on the record and Appellant requests that prosecution should be reopened.” Appeal Br. 11. We do not think there was any lack of clarity and thus, lack of adequate notice, as to this particular grounds for rejecting claims 1, 3, and 4. As was done here (Final Act. 5), Examiners regularly point out the manner in which they are resolving ambiguities for the sake of practicing compact prosecution. MPEP§ 2173.06. Furthermore, issues related to the clarity of Examiner Office Actions prior to an appeal should be resolved by requesting an interview or filing a petition under 37 C.F.R. § 1.104 prior to taking the appeal. A request to reopen prosecution after filing an Appeal Brief is available under the procedures outlined in MPEP §§ 1215 and 1207. Appellant has not elected to pursue any of the available options outlined in those sections of the MPEP.

³ The Examiner withdrew reliance on Shah and Hekman. Ans. 11.

OPINION

Claims 1, 3, and 4 are indefinite for being directed to multiple statutory classes.

The Examiner rejected claims 1, 3, and 4 on the grounds that “[c]laims 1, 3 and 4 are apparatus claims. While latter parts of them have the styling of a method claim, it cannot be considered both an apparatus claim and also a method claim, it must be one or the other.” Final Act. 4–5.

Appellant argues this grounds of rejection as a group, for which we select claim 4, reproduced above, as representative under 37 C.F.R.

§ 41.37(c)(1)(iv). We select claim 4 as representative in part because claims 1 and 3 contain language making claims 1 and 3 unclear for additional reasons, discussed below, that prevent us from addressing this issue with sufficient certainty.

Appellant’s argument is premised on *Mastermine Software Inc. v. Microsoft Corporation*, 874 F.3d 1307 (Fed. Cir. 2017). Appeal Br. 11. However, Appellant misreads *Mastermine*. According to Appellant, in *Mastermine*, “the court explained that claims directed to both a method and apparatus are not necessarily indefinite for using functional language.” This is not correct. What the court stated in this regard was, “while a claim directed to both a method and an apparatus may be indefinite, ‘apparatus claims are not necessarily indefinite for using functional language.’” Functional language is perfectly acceptable in an apparatus claim, for example, when “the functional language tells us something about the structural requirements of the [apparatus].” *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1363 (Fed. Cir. 1999). Here, rather than reciting functional language that informs the reader about the structural requirements of the claimed apparatus, claim 4 recites manipulative steps that obfuscate the

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reader regarding the requirements for infringement of the claim. The claim recites the active step that the “machine creates a hole” by “using” the recited steps. Indeed, even the first clause of the preamble is directed to “A multi-axis holemaking machine *using* a method.”⁴ Claim 4, in its present form, makes it impossible for the potential infringer to ascertain whether infringement occurs and the possibility of liability for contributory infringement “because a buyer or user of the apparatus later performs the claimed method of using the apparatus.” *See IPXL Holdings v Amazon.com*, 430 F.3d 1377, 1384 (Fed. Cir. 2005); MPEP § 2173.05(p)(II).

Accordingly, we sustain the Examiner’s rejection of claims 1, 3, and 4 on this grounds.

Additional issues related to the clarity of claims 1 and 3.

We agree with the Examiner that the scope of “**without pre-processing or modification**” is unclear. Final Act. 3; Ans. 13. The Examiner provides examples involving workpiece setup, such as fixturing the workpiece, to question what is or is not included in the scope of the negative limitation “without pre-processing.” Final Act. 3. Appellant responds by arguing “the plain meaning of these words is clear and unambiguous.” Appeal Br. 9. Appellant describes a number of processes such as flattening and softening that clearly fall within the scope of “pre-processing.” However Appellant never addresses whether activities such as fixturing constitute pre-processing. Appellant acknowledges pre-processing

⁴ Claim 3 contains similar language, “A multi-axis machining apparatus *utilizing* a method. . .” (Emphasis added), as does the present title of the application, “Method And Apparatus For Non-Rotary Holemaking. . .” when Appellant contends all the claims are directed to apparatuses as opposed to methods. *See* MPEP § 606 (The title of the invention should be descriptive of the invention claimed).

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can include “otherwise prepar[ing] the material.” Appeal Br. 9. The scope of what “otherwise prepare” can cover is not readily discernable and is similar to language generally regarded as too uncertain for purposes of particularly pointing out the scope of the claimed subject matter. *See, e.g.*, MPEP § 2173.05(d), 706.03(d) (“or the like”). We therefore sustain the rejection of claim 1 under § 112(b) on this grounds as well.

We also agree with the Examiner that the language of claim 3 “without a counterstrike, die or other counter-tool used on the opposite side of the workpiece” is unclear for similar reasons as those discussed in the preceding paragraph with regard to claim 1. Final Act. 4; Ans. 15. Namely, it is unclear what is encompassed by “other counter-tool.” The Examiner questions whether a workpiece table, for example, can be regarded as a “counter-tool.” Appellant argues that “no die or other counter-tool” is permissible under the claim language Appeal Br. 11. However, Appellant does not provide any explanation of how the claim language should be construed specifically responding to the issue raised by the Examiner. It remains unclear what is encompassed by “other counter-tool.” We therefore sustain the rejection of claim 3 under § 112(b) on this ground as well.

Also with regard to claim 3, it is not clear why the Examiner determines that “‘repositioning’ implies that the cutting tool is not perpendicular to the workpiece” because repositioning can include rotation or translation which, depending on the shape of the workpiece, do not preclude the cutting tool from being perpendicular after repositioning. Accordingly, we do not sustain the rejection of claim 3 under § 112(b) on this grounds.

Turning back to claim 1, the Examiner considers the limitations in claim 1 requiring the table to support the workpiece without obstructing the

hole area as contradictory. Final Act. 3–4; Ans. 14. We agree with Appellant that “[t]he table [can] support the workpiece [and] not obstruct the area where the though hole is created.” This is dependent on the configuration of the workpiece and location of the hole. The fact that Figure 3 and the disclosure might not, respectively, illustrate or describe exactly how this is achieved could, respectively, create issues under 37 C.F.R. § 1.83(a) (discussed at MPEP § 608.02(d)) and § 112(a). However, this does not present any clarity issues addressable under § 112(b). *See* MPEP § 2174 (Relationship between the Requirements of 35 U.S.C. § 112(a) and (b)). We therefore do not sustain the Examiner’s § 112(b) rejection of claim 1 on this grounds.

We point out the following additional issues related to claims 1 and 3 for the sake of advancing any further prosecution of this Application. We note that while the Board is authorized to enter new grounds of rejection under 37 C.F.R. § 41.50(b), no inference should be drawn when the Board elects not to do so. *See* MPEP § 1213.02.

In claim 1, the phrase “wherein the non-rotary holemaking machine used to produce a hole in metal and plastic material without pre-processing or modification of the material” appears to be either missing language somewhere or has used an incorrect form of the verb “used.”

In claim 3 the phrase, “wherein the multi-axis machining apparatus operates to adjust the non-rotary machine tool about its longitudinal axis for optimizing the force of the machine tool for producing a hole in nonmetallic material using non-rotary machining comprising the steps of” is ambiguous because it is not clear to what process “comprising the steps of” is referring back to, the “operates to adjust” process, the “optimizing” process, or the “producing a hole” process. The claim recites steps that result in a hole.

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However, the language in question only requires “operat[ing] to adjust” “*for* optimizing” (emphasis added) the force “*for* producing a hole.” If the recited steps are directed to the hole producing process, it is unclear what effect, if any, reciting specific steps associated with a hypothetical process, hypothetically optimized, has on the structure of the claimed apparatus.

Enablement

The Examiner rejected claims 1, 3, and 4 for failure to comply with the enablement requirement. Final Act. 2. According to the Examiner, “it appears that there is not enough information so that one skilled in the art to make use of the invention. The thickness of the workpiece is lacking. That amount of force cannot work on every thickness.” Final Act. 2; *see also* Ans. 12–13. The Examiner has established that *some* experimentation is required to practice the invention. However, the Examiner has not established that such experimentation would be *undue*, as is required for establishing a lack of enablement. The Examiner has not sufficiently address the various factors outlined in MPEP § 2164 and cases cited therein to demonstrate the absence of an enabling disclosure. Accordingly, we do not sustain this rejection.

Obviousness

We do not reach the merits of the rejections under 35 U.S.C. § 103 at this time. Before a proper review of the rejection under 35 U.S.C. § 103 can be performed, the subject matter encompassed by the claims on appeal must be reasonably understood without resort to speculation. Since claims 1, 3, and 4 fail to satisfy the requirements of the second paragraph of 35 U.S.C. § 112 we are constrained to reverse, *pro forma*, the rejection under

35 U.S.C. § 103 without reaching the merits of that rejection. *See In re Steele*, 305 F.2d 859, 862 (CCPA 1962) (A prior art rejection cannot be sustained if the hypothetical person of ordinary skill in the art would have to make speculative assumptions concerning the meaning of claim language.); *see also In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970) (“If no reasonably definite meaning can be ascribed to certain terms in the claim, the subject matter does not become obvious-the claim becomes indefinite.”).

CONCLUSION

The Examiner’s rejections under § 112(b) are **AFFIRMED**, but only on the grounds specifically indicated above.⁵ The Examiner’s rejections under §§ 112(a) and 103 are **REVERSED**.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 3, 4	112(a)	enablement		1, 3, 4
1, 3, 4	112(b)	indefinite	1, 3, 4	
1, 3, 4	103	Julian, Schafer, Someno		1, 3, 4
Overall Outcome			1, 3, 4	

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

⁵ “The affirmance of the rejection of a claim on any of the grounds specified constitutes a general affirmance of the decision of the examiner on that claim, except as to any ground specifically reversed.” 37 C.F.R. § 41.50(a).

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AFFIRMED⁶

⁶ See Note 5.