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EXAMINER

LEWIS, RALPH A

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PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HUPING HU

Appeal 2018-007211
Application 11/944,631
Technology Center 3700

Before: CHARLES N. GREENHUT, JEFFREY A. STEPHENS, and
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

GREENHUT, *Administrative Patent Judge*.

DECISION ON APPEAL¹

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from a rejection of claims 1, 7, 9, 10, 16, 18, 19, 25, 27, and 70–81. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Related appeals are: 2018-003398 in application 13/449,739; 2018-003401 in application 13/492,830; and 2018-003120 in application 11/670,996.

CLAIMED SUBJECT MATTER

The claims are directed to a method for producing non-local physical, chemical, and biological effects. Claim 1, reproduced below, is illustrative of the claimed subject matter:

Claim 1. A method of producing a non-local effect in a target substance through manipulating an originating substance and detecting said non-local effect which comprises the steps of:

- selecting a substance which comprises said target substance and said originating substance;
- generating a plurality of quantum entanglements within a plurality of quantum entities in said substance by irradiating said substance with magnetic pulse, laser light or microwave, or letting said substance sit for at least thirty days;
- separating said substance into said target substance and said originating substance;
- positioning said target substance at a first location in a first stable environment and said originating substance at a second location in a second stable environment;
- cooling, heating or adding a third substance to said originating substance; and
- detecting with a high-precision instrument a change in weight, temperature and/or pH value of said target substance;

whereby said non-local effect is produced through a non-local process mediated by said quantum entanglements and said non-local effect is said change in weight, temperature and/or pH value of said target substance.

REJECTIONS

Claims 1, 7, 9, 10, 16, 18, 19, 25, 27 and 70–81 are rejected under 35 U.S.C. § 101 because the disclosed invention is inoperative and therefore lacks utility, and also under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

OPINION

Ancillary matters

Objection of Amendment under 35 U.S.C. § 132(a)

Appellant argues “this objection is appealable since the Examiner’s new matter objection to the specification is related to and accompanied by Examiner’s claim rejection under 35 U.S.C. § 112, first paragraph.” App. Br. 52 (citing MPEP §§ 608.04(c), 2163.06). Although the Examiner made a rejection under § 112, first paragraph, that rejection is based on the enablement requirement and is not of the type necessitated by introducing new matter into the claims—typically premised on the written description requirement of § 112, first paragraph. *See, e.g., In re Lukach*, 442 F.2d 967 (CCPA 1971) (explaining new or amended claims which introduce elements or limitations which are not supported by the as-filed disclosure violate the written description requirement). We recognize that the Examiner did cite certain shortcomings in Appellant’s experimental results, as originally filed, as part of the Examiner’s original analysis concerning enablement. Final Act. 12. However, for purposes of the enablement analysis the Examiner has given Appellant the benefit of considering the amended data despite the Examiner’s objection to that data as new matter. In other words, the analysis of Appellant’s experimental results in the enablement rejection is independent of the issue of whether the amended results constitute new matter. Further, as discussed below, the entry or non-entry of the amendments would not affect the outcome of our decision. Thus, we are not apprised as to how the new matter objection sufficiently relates to a rejection presently before us so as to bring that objection within our jurisdiction. Accordingly, we do not reach the merits of the objection herein.

Alleged New Ground of Rejection

Appellant contends “the Examiner’s Answer introduces **New Ground of Rejection** by way of *Wands* [*In re Wands*, 858 F.2d 731 (Fed. Cir. 1988)] factors analysis.” Reply Br. 5. First, although the Examiner introduced express citations to *Wands* and the various enumerated factors listed in MPEP § 2164.01(a) (*see* Ans. 8–9), we are not apprised of any significant substantive changes in the Examiner’s analysis that prejudiced Appellant. The Examiner provided a very thorough and detailed analysis in support of the enablement rejection that touched on a variety of the *Wands* factors even if they were not mentioned specifically by name or provided with a specific citation. *See* Final Act. 9–37. Second, Appellant elected to file a reply brief addressing the merits of the Examiner’s position and, in doing so, waived “any arguments that a rejection must be designated as a new ground of rejection.” *See* 37 C.F.R. § 41.40(a). Appellant’s Reply Brief provided sufficient opportunity to respond to the merits of the Examiner’s rejection. *See, e.g., In re Anderson*, 662 F. App’x 958 (Fed. Cir. 2016) (nonprecedential). Accordingly, we do not reach the issue of whether the Examiner’s Answer included an undesignated new grounds of rejection.

Enablement under § 112, first paragraph, and utility under § 101

For each of these rejections, Appellant argues the claims as a group (App. Br. 9–52), for which claim 1 is representative under 37 C.F.R. § 41.37(c)(1)(iv). With regard to the questions of enablement and utility, our reviewing court has summarized:

The questions of whether a specification provides an enabling disclosure under § 112, ¶ 1, and whether an application satisfies the utility requirement of § 101 are closely related. To satisfy

the enablement requirement of § 112, ¶ 1, a patent application must adequately disclose the claimed invention so as to enable a person skilled in the art to practice the invention at the time the application was filed without undue experimentation. The utility requirement of § 101 mandates that the invention be operable to achieve useful results. Thus, if the claims in an application fail to meet the utility requirement because the invention is inoperative, they also fail to meet the enablement requirement because a person skilled in the art cannot practice the invention. The how to use prong of section 112 incorporates as a matter of law the requirement of 35 U.S.C. § 101 that the specification disclose as a matter of fact a practical utility for the invention. Lack of utility is a question of fact, and the absence of enablement is a legal conclusion based on underlying factual inquiries.

In re Swartz, 232 F. 3d 862, 863 (Fed. Cir. 2000) (quotations and internal citations omitted); *see also* MPEP § 2164.07.

Paragraphs 8 and 9 of Appellant's Specification summarize the invention as follows:

[Para 8] The subject invention is therefore based on my realizations that (1) quantum entanglement means genuine interconnectedness and inseparableness of once interacting quantum entities and can be directly sensed and utilized by the entangled quantum entities; (2) quantum entanglement can persist in biological, chemical and physical systems at room and higher temperatures despite of quantum decoherence; and (3) quantum entanglement can influence chemical and biochemical reactions, other physical processes and micro- and macroscopic properties of all forms of matters. Therefore, it can be harnessed and developed into useful technologies to serve the mankind in many areas such as communication, engineering, health, medicine and recreation.

[Para 9] For example, using the apparatus and method developed in this invention I have discovered that the pH value of water in a detecting reservoir can be non-locally affected through manipulating water in a remote reservoir quantum-entangled with the water in the detecting reservoir.

The Examiner provided a detailed analysis, citing various evidentiary sources, including, but not limited to, those submitted by Appellant, in considering the question of enablement, and the question of whether the claimed invention contravenes established scientific principles, as that question relates to the utility requirement. *See* Final Act. 3–37; Ans. 11–39. We agree with the Examiner’s analysis, which raised reasonable doubts as to operability of Appellant’s invention and the Specification’s compliance with the enablement requirement.

In response, Appellant cites, *inter alia*, paragraphs 47–49 of the Specification (App. Br. 43–44), which, along with Figure 1, are reproduced below to summarize an embodiment of Appellant’s invention:

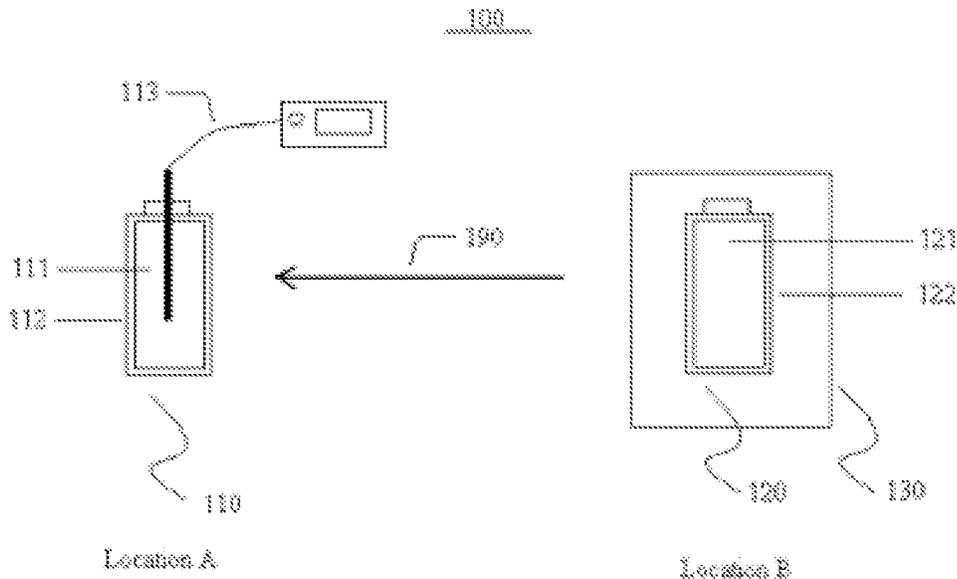


FIG. 1

[Para 47] Considering first FIG. 1, the apparatus 100 of the present invention in one embodiment includes a target 110, a source 120 and said mean 130 for manipulating said source 120. Said target 110 further includes the target substance 111, said

first container 112 holding said substance 111 and said internal probe 113 inserted into said container 112. Said source further including said originating substance 121 and said second container 122 holding said substance 121.

[Para 48] In one particular embodiment, the target substance 111 and originating substance 121 are quantum-entangled water prepared according to one of the said quantum entanglement process, the internal probe is a traceable-calibration digital thermometer with a resolution of 0.001°C and repeatability of 0.002°C in liquid near 25°C, container 112 is a small flat glassware of the dimensions about 1"x4"x6" (thickness, width, height) with a useful internal volume of about 250ml, container 122 is a round plastic ware of the dimensions 2"x7" (diameter, height) with a useful internal volume of about 350ml, and the manipulation mean 130 is a particular embodiment of mean 131 shown in FIG. 2 which includes a 25-liter Dewar and 10-25 liters of liquid nitrogen filling said Dewar. The container 112 has a removable cap so that it can be filled, emptied, closed and fitted with the said probe 113. The container 122 also has a removable cap so that container 122 can be filled, emptied and closed. It will be understood, however, that the invention is not limited only to quantum-entangled water but also applies to other quantum-entangled media. It will be further understood that the internal probe is not limited only to the said digital thermometer but also applies to other internal probes such as pH meter and conductivity meter depending on a particular purpose.

[Para 49] To use the apparatus having this particular embodiment for a desired purpose such as non-local signaling, control of a device or manipulation of the physical and or chemical properties of the target substance, one disposes the said target 110 to a desired location A with well-controlled environment and the said source 120 to another desired location B, operates the manipulation mean 131 by submerging the container 122 containing substance 121 into the 25-litre Dewar filled with 10-25 liters of liquid nitrogen for a desired length of time whereby the target substance 111 are remotely influenced by the operation of the said manipulation mean through non-local process 190 mediated by quantum entanglement between the target substance 111 and originating substance 121, and records readings of said

probe 113 both before and during the operation of the said mean 131 for a desired period of time depending on a desired purpose.

We have no doubt that if Appellant's invention is able to use quantum entanglement to alter the weight, temperature and/or pH value of a *first* substance by modifying only some other *second* substance that had previously been exposed to "magnetic pulses, laser light, or microwave," with the first substance it would be both groundbreaking and revolutionary. *See* Reply Br. 6. However, due to the absence of any known scientific principles explaining how Appellant's invention could possibly operate in this manner, the absence of any cogent explanation in Appellant's Specification regarding the general principals or mechanisms causing this to occur,² and the absence of any verifiable test data reasonably attributable to the purported result, the Examiner reasonably characterized Appellant's invention as being of an incredible nature. *See, e.g.*, MPEP § 2107.01(II).

² That is not to say that Appellant *must*, in all cases, explain the scientific principles governing how a device operates if they are not known. *See In re Anfhauser*, 399 F.2d 275, 283 (CCPA 1968) (explaining an applicant "is not legally required to comprehend the scientific principles on which the practical effectiveness of his invention rests"). However, Appellant makes no assertion *here* that the governing principles are unknown. Rather Appellant repeatedly asserts, citing various sources of extrinsic evidence, that the principles would be readily understood by those skilled in the art (App. Br. 43, 47, 50, and 53–57) even if they are misunderstood by the Examiner (App. Br. 15, 16, 43, 57, 60, 66, 89, 91, and 93). If the principles governing the operation of Appellant's method were so readily amenable to understanding we see no reason to omit an explanation of them from Appellant's Specification and Appellant's extensive briefing. The cited articles do not fill in these gaps with specific relevance to the subject matter in question presently before us. Furthermore, the fundamental issue is not whether Appellant has explained how the claimed invention works. Rather, the requirements of utility and enablement consider whether Appellant's invention works as claimed.

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Despite providing eighty-six pages of arguments and voluminous amounts of papers and articles on the subject, we are not apprised of any error in the Examiner's determinations. We find no explanation as to why ordinary and conventional magnetic pulse, laser light, or microwave produces any meaningful quantum entanglements and, even if it did, why it would have any meaningful long-lasting effects on a substance so as to cause a substance to exhibit changes in weight, temperature, and/or pH due to alterations made to a separate and discrete portion of that substance. There is no explanation offered as to why spin or any other quantum property of entangled particles would bring about these types of changes in a remote, "non-local" portion of a sample or substance. We are also not apprised of any data logically evincing such an interaction has actually occurred. We agree with the Examiner that Appellant's pH data, as amended or as originally filed, is not readily decipherable and is of questionable validity. Ans. 38–39. The various articles cited by Appellant are either generic in nature and discuss only the possibility of quantum entanglements occurring without explaining any reason they would cause the interactions alleged in the present application, from sources regarded as having no scientific value,³ or both.

In 1931, the predecessor to our reviewing court considered a case involving a "Method and Apparatus for Accumulating and Transforming

³ See, e.g., IN THE NORWEGIAN REGISTER FOR SCIENTIFIC JOURNALS, SERIES AND PUBLISHERS: JOURNAL OF BIOPHYSICAL CHEMISTRY, available at <https://dbh.nsd.uib.no/publiseringskanaler/KanalTidsskriftInfo.action?id=478691>; NEUROQUANTOLOGY, available at <https://dbh.nsd.uib.no/publiseringskanaler/KanalTidsskriftInfo.action?id=473508>; PROGRESS IN PHYSICS, available at <https://dbh.nsd.uib.no/publiseringskanaler/KanalTidsskriftInfo.action?id=473750>.

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Ether Electric Energy.” The court’s reasoning there is equally applicable here:

It is fundamental in patent law that an alleged invention, to be patentable, must be not only new but useful, and that it must appear capable of doing the things claimed in order to be a device of practical utility.

The rule of doubt may only be applied in favor of an applicant where the doubt is a reasonable one, that is, one founded in reason and engendered by testing the alleged invention by known scientific laws and principles.

Neither the Patent Office tribunals nor the courts may properly grant patents upon a mere possibility that a device might do the things claimed for it, and be useful. There must be definiteness. Neither the Constitution nor the statutes contemplate the granting of patents upon theories, nor giving a monopoly upon intellectual speculations embodied in devices incapable of scientific analysis.

The question of patentable invention ordinarily must be determined by applied science, as understood by those skilled in the art to which the invention relates, and, if one presents a device which cannot be tested by any known scientific principles, he must, at least, demonstrate its workability and utility and make clear the principles upon which it operates.

No such demonstration here appears from appellant’s application, or otherwise. Three affidavits are presented of parties who claim to have seen appellant’s device in operation and who vouch for its working. These affidavits, however, are brief, general in character, and give no description of the device which affiants saw. Nor do they give any explanation which contains anything tending to clarify the terminology of the specification, or to render the device measurable by engineering principles or known natural laws.

In re Perrigo, 48 F.2d 965, 966 (CCPA 1931) (citations omitted); *accord In re Ferens*, 417 F.2d 1072, 1074 (CCPA 1969) (“[W]here an applicant predicates utility for the claimed invention on allegations of the sort here which are or border on the incredible in light of contemporary knowledge of

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the particular art, those allegations must be substantiated by acceptable evidence.”); *In re Eltgroth*, 419 F.2d 918, 922 (CCPA 1970) (“The invention relates to the control of growth, aging and degeneration in living organisms, particularly to appellant’s alleged discovery of what appears to be a key for the solution of the problems associated with these life processes. . . . Undoubtedly, the alleged utility of control of the aging process in living organisms and the significant beneficial results flowing therefrom is adequate. Yet, there is a conspicuous absence of proof thereof.”).

For the foregoing reasons and those stated by the Examiner (Final Act. 3–37; Ans. 11–39), after consideration of the evidence and arguments of record, we are not apprised of error in the Examiner’s position concerning a lack of utility under § 101 and a lack of enablement under § 112, first paragraph.

DECISION

The Examiner’s rejections are affirmed.

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).

AFFIRMED