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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/541,072	12/02/2021	Marc-Antoine Pelletier	48656-0003RE1	3099

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EXAMINER	
FERRIS III, FRED O	

ART UNIT	PAPER NUMBER
3992	

NOTIFICATION DATE	DELIVERY MODE
02/23/2024	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No. 17/541,072	Applicant(s) Pelletier et al.	
	Examiner FRED O FERRIS III	Art Unit 3992	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 11/07/2023.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☑ This action is **FINAL.** 2b) ☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 20-34 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 20-34 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date 8/18/22.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

DETAILED ACTION

This office action is responsive to reissue application 17/541,072 filed Dec. 2, 2021 of US Patent Number US 9,655,279 B2 issued to Pelletier *et al* on May 16, 2017.

For reissue applications filed on or after September 16, 2012, all references to 35 U.S.C. 251 and 37 CFR 1.172, 1.175, and 3.73 are to the current provisions.

Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 8,515,912 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

Status of claims

Original claims 1-19 are cancelled. Claims 20-34 are new and now pending

Response to Arguments

Claim objections: The previous objection to claims 21 and 24 are withdrawn in view of applicant's amendment to the claims.

37 CFR 1.173(c) Objections: Withdrawn in view of applicants' showing of support for claim changes.

Reissue Oath/Declaration: The 35 USC 251 rejection is being held in abeyance per applicant's request. (Response at page 7)

Recapture: Applicants argue that the pending claims are drawn to an overlooked aspect of the invention. However, the examiner submits that overlooked aspects are distinct elements which were never claimed and thus never surrendered. (MPEP 1412.01 III) Applicants have not shown how any of the elements of the instant claims are drawn to distinct elements that were overlooked and not previously claimed. Further, MPEP 1412.01 establishes that claims to separate inventions/embodiments/species that were disclosed but never covered by the claims in the original application prosecution are claims to overlooked aspects. In other words, the reissue claims should be drawn to a separate invention or separate species or embodiment that was not covered by a claim at any point during the original prosecution. Upon review, the examiner finds that the original claims required a system for cooling a CPU including a tank for holding dielectric coolant, a cover and a pathway conveying power signal, inclusive of *inter alia* a control device for adjusting the level of dielectric coolant responsive to cooling demand for the CPU. Amended apparatus claim 20, and new claim 28 do not appear to have deviated from the original requirement such that a separate embodiment and/or invention is now being claimed.[1] Accordingly, the recapture rejection is maintained.

Claim Rejections - 35 USC § 112: Applicants argue that, because the claims have been amended, the rejection should be withdrawn. Upon review the examiner finds that independent claims 20 and 28 now require the following;

ii. a cover, the CPU being coupled to the cover,
the cover being configured to be releasably mountable to the tank to seal the tank and place the CPU surface in direct contact with the coolant.

Applicants have cited passages at column 1, lines 44 to 49; column 3, lines 42 to 55; column 4, lines 4 to 18; column 9, and lines 11 to 46 as support. While the examiner agrees that

[1] See also claim 1 filed 3/13/2015 in parent application 14/428,269.

the cited passages provide clear support for features relating to the CPU being coupled to the cover and in direct contact with the coolant, the cited passages do not appear to disclose HOW the cover is "configured to" be releasably mountable to the tank as claimed. Further, Fig. 4, which is described as disclosing an enlarged view of the lid of the cooling chamber (e.g. at 2:15) does not appear to demonstrate how the lid is "configured to be releasably mountable" to the tank as claimed. Finally, the examiner notes that the '279 specification appears to use the term 'cover" and "lid" to refer to the same element [26]. Accordingly, the 112 rejections are maintained as set forth below.

Claim Rejections - 35 USC§ 103: Applicants argue that the newly amended limitation requiring "*a tank for holding a dielectric coolant in a liquid phase, wherein the CPU has a surface in direct contact with the coolant for heat transfer from the CPU surface to the coolant, and wherein the CPU surface includes a porous layer forming a porous network having open pores and a pore-size gradient.*" distinguishes the claims over cited prior art. The examiner agrees and withdraws the previous 103 rejections.

Reissue Oath/Declaration

The reissue oath/declaration filed 12/02/2021 with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application.

See 37 CFR 1.175 and MPEP § 1414. The declaration states in-part:

It is not sufficient for an oath/declaration to merely state that the invention is "broadened by way of two new categories of invention." Rather, the oath/declaration must specifically identify an error. In addition, it is not sufficient to merely reproduce the claims with brackets and underlining and state that such will identify the error. See *In re* Constant, 827 F.2d 728, 729, 3

USPQ2d 1479 (Fed. Cir.), cert. denied, 484 U.S. 894 (1987). Any error in the claims must be identified by reference to the specific claim(s) and the **specific claim language** wherein lies the error.

It is acknowledged that applicants have filed a broadening reissue and that claims 20-29 are new. However, the alleged error of not requiring *"said coolant having a first fraction and a second fraction, the first fraction having a different boiling point from the second fraction"* as required by original claim 1 appears to be based on recaptured subject matter. (see below)

Thus, the error is defective.

Claims 20-29 are rejected as being based upon a defective reissue oath/declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the oath/declaration is set forth in the discussion above in this Office action.

Recapture

Claims 20-34 are rejected under 35 U.S.C. 251 as being an impermissible recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.

See *Greenliant Systems, Inc. et al v. Xicor LLC*, 692 F.3d 1261, 103 USPQ2d 1951 (Fed. Cir. 2012); *In re Shahram Mostafazadeh and Joseph O. Smith*, 643 F.3d 1353, 98 USPQ2d 1639 (Fed. Cir. 2011); *North American Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 75 USPQ2d 1545 (Fed. Cir. 2005); *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984).

The reissue application contains claim(s) that are broader than the issued patent claims. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claimed subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application. New claims 20-34 are broader than original patented claims 1-19 at least in that they do not require *coolant having a first fraction and a second fraction, the first fraction having a different boiling point from the second fraction*;.

During prosecution of the '269 application, the examiner applied the prior art reference Attlesey et al to independent claim 1 in a rejections under §§ 102. *See* '269., Non-Final Rejection 2/5/2016, pp. 2. The applicant amended independent claim 1 to include, ". . . *coolant having a first fraction and a second fraction, the first fraction having a different boiling point from the second fraction*, ". . . Response,11/18/2016. In other words, the claims were asserted as distinguishable from prior art adding the limitation requiring *coolant having a first fraction and a second fraction, the first fraction having a different boiling point from the second fraction*, ".. *See id.*

New claims 20-29, by contrast, have eliminated the feature requiring *coolant having a first fraction and a second fraction, the first fraction having a different boiling point from the second fraction*, ". Because these features were specifically added to independent claim 1 (the only independent claim) by an amendment to make the claims allowable over the prior art and the applicant relied on these features to overcome the prior art, these features relate to surrendered subject matter. See, e.g. MPEP 1412.02 II(B)(2) Since these features do not appear

to be present in new claims 20-29, the broadening of the reissue claims is clearly in the areas of the surrendered subject matter. The reissue claims do not appear to have been materially narrowed relative to the surrendered subject matter.

Claim Rejections - 35 USC § 112

Claims 20-34 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for applications subject to pre-AIA 35 U.S.C. 112, the inventor(s), at the time the application was filed, had possession of the claimed invention.

Specifically, amended independent claim 20 and new claim 28 recite the phrase ***the*** *cover being configured to be releasably mountable to the tank to seal the tank and place the CPU surface in direct contact with the coolant.* However, the '279 specification does not appear to disclose HOW the cover is actually "configured to" be releasably mountable to the tank as claimed. Further, Fig. 4, which is described as disclosing an enlarged view of the lid of the cooling chamber (e.g. at 2:15) does not appear to demonstrate how the lid is "configured to be releasably mountable" to the tank as claimed.

Claims 20-29 are further rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor (or for applications subject to pre-AIA 35 U.S.C. 112, the applicant), regards as the invention.

Specifically, the term *the cover being configured to be releasably mountable to the tank* is ambiguous because the '279 specification does not make clear how the cover or lid is is actually configured to be releasably mountable as claimed. Further, the examiner notes that the '279 specification appears to use the term 'cover" and "lid" to refer to the same element [26].

Dependent claims inherit the defect of the claims from which they depend.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hetul Patel can be reached at (571) 272-4184.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-9000. Information regarding the status of an application may be obtained from the

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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