

REMARKS

Office Action

In the Office Action mailed on January 23, 2018, claim 8 and 19 were objected to because of informalities. Claim 15 was rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as failing to point out and claim the subject matter of the disclosure. Claims 1-4, 7, 11, 14 and 17 were rejected under 35 U.S.C. 103 as being unpatentable over U.S. Publication Number 2004/0262803 to Neilsen et al. (hereinafter "Neilsen") in view of U.S. Patent Number 5,141,680 to Almquist et al. (hereinafter "Almquist") and in further view of U.S. Publication Number 2016/0096326 to Naware and U.S. Publication Number 2016/0067740 to Voris et al. (hereinafter "Voris"). Claims 5-6 and 15-16 were rejected under 35 U.S.C. 103 as being unpatentable over Neilsen in view of Almquist and Naware and Voris and in further view of U.S. Publication Number 2014/0220168 to Perez et al. (hereinafter "Perez"). Claims 11-20 were rejected on the ground of nonstatutory double patenting. Claims 8-10 and 18-20 were indicated as being allowable if rewritten to include the limitations of the rejected base claim and any intervening claims.

Response

SPECIFICATION AMENDMENTS

The amendments to paragraph [1] of the specification presented above add the information in the priority claim that identifies the patent number and issue date of the parent application to this application. Therefore, no new matter is being submitted with these amendments.

CLAIM OBJECTIONS

The amendment to claim 8 presented above corrects the typographical error noted in the Office Action. The amendment to claim 19 presented above removes the redundant language in the claim as noted in the Office Action. Applicants submit that the objections to the claims are now moot.

CLAIM INTERPRETATION

Applicants note that the word “spontaneously” is not present in any of the pending claims and that the section entitled Claim Interpretation in the Office Action does not appear to be pertinent to the examination of this application.

SECTION 112 GROUND OF REJECTION

The amendment to claim 15 presented above more particularly identifies the actuator in the claim. Therefore, Applicants submit that the section 112 ground of rejection of this claim has been fully addressed and should be withdrawn.

SECTION 103 GROUND OF REJECTION

Claim 1

Claim 1 has been amended to require:

operating an actuator with the controller to rotate the platen from a first position that is horizontally level to a second position that is not horizontal after the three-dimensional object is formed on the platen; and

operating an inductive heater with the controller to heat the platen as the platen is rotated to the second position to release the three-dimensional object from the platen and enable gravity to remove the three-dimensional object from the non-horizontal platen.

Support for the amendments to the claim are found in paragraph [23]. The Voris reference teaches that the platen is rotated *during* formation of an object to enable overhanging features to be produced without support structure as noted in the Office Action. *Office Action*, page 7, lines 7-8. The platens of Naware, Almquist, and Neilsen are stationary so they contain no teachings on rotation of the platens. Therefore, the references of record contain no evidence that a controller would operate an actuator to rotate a platen *after* the object is formed *and* operate an inductive heater *as* the platen is being rotated to remove the object from the platen. This synchronization is unknown to the art so the position taken in the Office Action that tilting the platen while the platen is at the second position to release an object from a heated platen is unsupported. Therefore, the section 103 ground of rejection of claim 1 should be withdrawn.

Also, Applicants note that the section 103 ground of rejection is based upon official notice of the state of the art. The Office Action states that “ordinary skill and common sense” enable one of ordinary skill in the art to know that incorporation of the tilting platen in the three-dimensional object printer to form overhanging features would necessarily lead to the controller operating the actuator *and* the inductive heater to heat the platen as it is being tilted by the actuator to release the object from the platen. This statement is tantamount to use of official notice of the state of the art without evidentiary support for such common knowledge. In *Arendi S.A.R.L. v. Apple, Inc.*, 119 U.S.P.Q.2d 1822 (Fed. Cir. 2016), the Federal Circuit stated that three caveats applied to the application of “common sense” in an obviousness analysis. The three caveats were (1) common sense is typically invoked to provide a known motivation to combine, not to supply a missing claim limitation, (2) common sense is not applied to supply a missing claim limitation “that plays a major role in the subject matter claimed,” and (3) common sense cannot supplant reasoned analysis and evidentiary support, *especially when dealing with a limitation missing from the prior art references specified. Id.* at 1825 to 1826. In the present application, none of the references of record teach or suggest the heating of a platen as it is being tilted to remove an object formed on the platen. Therefore, the obviousness rejection of claim 1 is not based on the type of reasoned analysis and evidentiary support necessary for such a ground of rejection and should be withdrawn.

Claims 2-10

Claims 2-10 depend from claim 1 so these claims include the elements of claim 1 noted above. Therefore, for the reasons set forth above with regard to claim 1, the combination of Naware, Almquist, Neilsen, and Voris fails to provide adequate support for the obviousness rejection of claims 2-10 so the section 103 ground of rejection of these claims should be withdrawn.

Claim 11

The amendments to claim 11 provide the elements to the claim that are similar to those noted above with regard to claim 1. Therefore, for reasons similar to those noted above

Amendment
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with regard to claim 1, claim 11 is also patentable over all references of record, either alone or in combination, and the section 103 ground of rejection of claim 11 should be withdrawn.

Claims 12-20

Claims 12-20 depend from claim 11 so these claims include the elements of claim 11 that are similar to claim 1 as noted above. Therefore, for the reasons set forth above with regard to claims 11 and 1, the combination of Naware, Almquist, Neilsen, and Voris fails to provide adequate support for the obviousness rejection of claims 12-20 so the section 103 ground of rejection of these claims should be withdrawn.

DOUBLE PATENTING REJECTION

The claims as amended require that the platen be tilted after the object is formed on the platen and that the controller operate the inductive heaters to heat the platen and release the object as the platen is rotated to the non-horizontal position. These limitations preclude the claims 11-20 from reading on the subject matter of claims 1-9 in the issued '964 patent. Therefore, Applicants submit that the double patenting ground of rejection be withdrawn.

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Conclusion

For the reasons set forth above, pending claims 1-20 are patentable over all references of record, either alone or in combination, and claims 11-20 do not cover the subject matter of claims 1-9 of the '964 Patent. Reexamination and allowance of all pending claims are earnestly solicited.

Respectfully submitted,
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