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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte UWE STUEVEN, MATTHIAS WEISMANTEL,
WILFRIED HEIDE, MARCO KRÜGER, VOLKER SEIDL,
STEFAN BLEI, DENNIS LÖSCH, RÜDIGER FUNK,
and ANNEMARIE HILLEBRECHT

Appeal 2019-000424
Application 14/266,367
Technology Center 1700

BEFORE MICHELLE N. ANKENBRAND, LILAN REN, and
MERRELL C. CASHION, JR., *Administrative Patent Judges*.

REN, *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 2–11 and 22–32. Act.² 3–44. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

CLAIMED SUBJECT MATTER

The claims are directed to a method for producing water-absorbent polymer particles with a higher permeability by polymerizing droplets of a monomer solution. Spec. 1:1–5. Claim 25, reproduced below, is illustrative of the claimed subject matter:

25. A process for preparing water-absorbing polymer beads by polymerizing droplets of a monomer solution, the process comprising:

- i) forming the monomer solution comprising
 - a) at least one ethylenically unsaturated monomer,
 - b) at least one crosslinker,
 - c) at least one initiator, and
 - d) water,

wherein a water-insoluble inorganic salt is suspended in the monomer solution; and

- ii) dropletizing the monomer solution of i) into a dropletization tower via a dropletization plate having at least one bore, wherein the monomer solution enters the at least one bore from the top of the bore and the pressure drop over the bore is less than 2.5 bar, and polymerizing the resulting droplets in the

¹ We use the word “Appellant” to refer to “Applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as “BASF SE (BASF), Ludwigshafen, Germany.” Appeal Br. 4.

² We refer to the Non-Final Action dated February 2, 2018 as “Act.”

dropletization tower in a carrier gas phase surrounding the droplets

to form water-absorbing polymer beads having a mean diameter of at least 150 μm , wherein the contents of the dropletization tower consist essentially of the droplets, the carrier gas, and the water-absorbing polymer beads,

wherein the process is performed in the absence of hydrophobic inert solvents.

Claims Appendix (Appeal Br. A-2).

REFERENCES³

The Examiner relies on the following prior art references:

Anderson	US 4,954,562	Sept. 4, 1990
Hennig	US 5,010,150	Apr. 23, 1991
Kimura	US 5,026,800	June 25, 1991
Levendis	US 5,269,980	Dec. 14, 1993
Chinh	US 5,541,270	July 30, 1996
Nishioka	US 6,033,780	Mar. 7, 2000
Bruhns	US 7,727,586 B2	June 1, 2010
Riegel	US 7,947,771 B2	May 24, 2011
Losch 658	US 7,968,658 B2	June 28, 2011
Losch 624	US 2008/0045624 A1	Feb. 21, 2008

REJECTIONS

1. The Examiner rejects claims 2–11, 22, 23, and 25–32 under 35 U.S.C. § 103 as being unpatentable over Levendis, Losch 658, Riegel, Chinh, and Bruhns. Act. 3.

³ The Examiner relies on Losch 658, Bruhns 586, and Riegel 771 as the English equivalents of the references applied by the Examiner, namely (WO 2006/024369 A1 to Losch (published March 9, 2006), WO 2006/079631 A1 to Bruhns (published August 3, 2006), and WO 2006/058683 A2 to Riegel (published June 8, 2006), respectively. Act. 3. For the purpose of this opinion, we also refer to noted English equivalents.

2. The Examiner rejects claim 24 under 35 U.S.C. § 103 as being unpatentable over Levendis, Losch 658, Riegel, Chinh, Bruhns, and Nishioka. Act. 14.
3. The Examiner rejects claims 2–11, 22, 23, and 25–30 under 35 U.S.C. § 103 as being unpatentable over Hennig, Anderson, Kimura, and Chinh. Act. 16.
4. The Examiner rejects claims 2–11, 22, 23, and 25–32 under 35 U.S.C. § 103 as being unpatentable over Hennig, Anderson, Kimura, Chinh, Schmid, and Bruhns. Act. 27.
5. The Examiner rejects claims 7–9 and 25–32 under 35 U.S.C. § 103 as being unpatentable over Hennig, Anderson, Kimura, Chinh, Losch 624, and Bruhns. Act. 29.
6. The Examiner rejects claims 2–11, 22, 23, and 25–32 under 35 U.S.C. § 103 as being unpatentable over Levendis, Losch 658, Riegel, and Bruhns. Act. 31.
7. The Examiner rejects claim 24 under 35 U.S.C. § 103 as being unpatentable over Levendis, Losch 658, Riegel, Bruhns, and Nishioka. Act. 42.

OPINION

We review the appealed rejections for error based upon the issues that Appellant identifies and in light of the arguments and evidence produced thereon. *Cf. Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (cited with approval in *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) (“[I]t has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections.”)). After having considered the evidence presented in this Appeal and each of Appellant’s

contentions (including those raised under Section J⁴ of the Appeal Brief), , we are not persuaded that Appellant has identified reversible error, and we affirm the Examiner's § 103 rejections for the reasons expressed in the Non-Final Office Action and the Answer. We add the following primarily for emphasis.

1. Rejection of claims 2–11, 22, 22, 23, and 25–32 over Levendis, Losch 658, Riegel, Chinh, and Bruhns

Appellant argues against the rejection of claims 2–11, 22, 22, 23, and 25–32 over Levendis, Losch 658, Riegel, Chinh, and Bruhns as a group. Appeal Br. 14–19. We select independent claim 25 as representative for the analysis. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Limitation: a “pressure drop over the bore is less than 2.5 bar”

Appellant argues that the Examiner erred in finding that the prior art teaches a “pressure drop over the bore is less than 2.5 bar” as recited in claim 25. Appeal Br. 17. Appellant, however, does not elaborate on the argument. Nor does Appellant address the Examiner's findings in support of the rejection. *Compare id.*, with Act. 8–9. For example, Appellant does not address the Examiner's finding that Losch 658 and Bruhns show that the prior art processes take place under the same condition of laminar flow as the process recited in claim 25 and, therefore, would result in the same pressure drop as recited in claim 25. *Compare* Appeal Br. 17, with Act. 8–9.

We further note that Appellant acknowledges the Examiner's finding that Chinh describes a polymerization process with a pressure drop between 2–7 bar across a nozzle. *Compare* Appeal Br. 15, with Act. 12–13 (finding

⁴ Section J does not specify the limitation or the claim to its contentions are directed.

that Chinh teaches that the “size of the droplet is influenced by the pressure drop in the nozzle” and a skilled artisan would have known to vary the pressure drop in relation to droplet size).⁵ An Appellant must support an argument that the process the prior art discloses is distinguishable from the claimed process with more than “bare assertion.” *In re Kemps*, 97 F.3d 1427, 1430 (Fed. Cir. 1996). The record does not support Appellant’s attorney argument and does not persuade us of reversible error in the Examiner’s factual findings. *See Johnston v. IVAC Corp.*, 885 F.2d 1574, 1581 (Fed. Cir. 1989) (“Attorneys’ argument is no substitute for evidence.”).

Appellant’s argument that Chinh teaches a horizontal pressure drop rather than a vertical drop recited in claim 25 is also not persuasive of reversible error. As the Examiner points out, Chinh describes “both vertical and horizontal arrangements of introduction of liquid into the fluidized bed.” Ans. 14. Appellant does not dispute the Examiner’s finding but, instead, argues that Chinh teaches a fluidized bed process distinguishable from the recited process. *Compare id.*, with Reply Br. 2–3; *see* Appeal Br. 17–18, 38–39. Whereas the Examiner explains, based on specific operational details of Chinh’s process, that Chinh teaches a polymerization process “by droplet

⁵ Appellant does not dispute the Examiner’s finding that Chinh teaches the pressure drop is a result effective variable, but argues that “the pressure drop conditions of [Chinh] do not even apply to the claimed invention.” Appeal Br. 39 (arguing that “the present claims do not encompass a fluidized bed polymerization [disclosed in Chinh] and do not add the monomer solution droplets horizontally, but rather vertically”). This argument is not persuasive because Appellant’s argument does not show that the effect of pressure drop on particle size is limited to the particular polymerization apparatus used in Chinh. To the extent this argument relates to a rationale to combine the references, we address the issue *infra*.

polymerization, wherein the droplets are formed by spray nozzles comprising plurality of outlets vertically disposed, and the size of the outlets is preferably such that there is little pressure drop through the outlets but sufficient to break the liquid into small droplets” (Act. 12), Appellant merely repeats that Chinh’s polymerization process uses a fluidized bed instead of a dropletization apparatus. Appeal Br. 18, 19, 37–39. Appellant, however, does not structurally distinguish Chinh’s apparatus from the apparatus used in claim 25 (“dropletization tower” and “dropletization plate”). *Id.* Appellant also does not explain sufficiently how Chinh’s process is operationally or otherwise different (other than the name of the apparatus used in Chinh) from the process recited in claim 25. *Id.* Appellant’s argument based solely on the assertion that Chinh’s process is not called a dropletization process is not persuasive. It is well established that a reference need not disclose a claim limitation *in haec verba* to satisfy that limitation for purposes of anticipation or obviousness. *Cf. In re Bode*, 550 F.2d 656, 660 (CCPA 1977) (holding that although anticipation requires disclosure of each and every element of the claim at issue in a single prior art reference, the disclosure need not be *in haec verba*).

Appellant’s argument is also unpersuasive as it attacks Chinh individually in isolation from all other cited references rather than considering what the combined references would have suggested to the person of ordinary skill in the art. “Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.” *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The Examiner cites Chinh for the teaching of the pressure drop along with Levendis, Losch 658, Riegel, and Bruhns for

the recited process steps. Appellant's argument does not take into account the combined prior art teachings that form the basis of the rejection and, therefore, is unpersuasive.

Combining the References

Appellant next argues that the Examiner reversibly erred in combining the references because Levendis teaches a spray polymerization process and the "present claims exclude a spray polymerization." Appeal Br. 17–18. Claim 25, however, recites a "process . . . comprising," and, thus, is an open ended claim that does not exclude spray polymerization. Appellant further argues that the prior art spray polymerization is distinguishable from a dropletization process, but does not specify the particular step recited in claim 25 missing from the prior art teachings. For example, the Examiner finds that "the process of making droplets from the monomer solution into the dilution gas using the multi-orifice plate of Levendis et al appears to correspond to the step of dropletization as claimed in instant invention." Act. 4–5. Appellant does not dispute the Examiner's finding that use of the multi-orifice in Levendis' polymerization teaches or suggests the recited "dropletizing . . . via a dropletization plate" step. Appeal Br. 18, 36 (asserting Levendis' process is different without sufficiently explaining why it is different). Appellant has not identified reversible error here.

Appellant also argues that the skilled artisan would not have had a reasonable expectation of success in combining the spray polymerization described in Levendis and Losch 658 to arrive at the recited dropletization polymerization process. Appeal Br. 18. As we note *supra*, Appellant does not specify any particular recited step that the prior art fails to teach or suggest. Appellant's argument is based solely on the distinction that

Levendis and Losch 658 do not use the term “dropletization” to describe the prior art processes. We again emphasize that a reference need not disclose a claim limitation *in haec verba* in order to satisfy that limitation for purposes of anticipation or obviousness. *See Bode*, 550 F.2d at 660.

Appellant also argues that an ordinarily skilled artisan would not have had a reasonable expectation of success in combining the prior art teachings based on the various differences among the references. Appeal Br. 18. For example, Appellant argues that a skilled artisan would not have combined Levendis with Losch 658, which requires the use of a hydrophobic solvent, to arrive at a process that “is performed in the absence of hydrophobic inert solvents” as recited in claim 25. Appellant also argues that Riegel describes using a metal sulfate in a polymerization process, which would clog the spray apparatus in Levendis and Losch 658. *Id.* These arguments are not persuasive. First, Appellant fails to support the argument with factual evidence. *Johnston*, 885 F.2d at 1581 (“Attorneys’ argument is no substitute for evidence.”). Further, Appellant’s arguments fail to consider the Examiner’s proposed combination, which does not incorporate all of the features of the secondary references. *See Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984) (stating that “the skilled artisan is not compelled to blindly follow the teaching of one prior art reference over the other without the exercise of independent judgment”). The Examiner’s obviousness analysis shows that all the recited steps were known and that the combination of these known steps, according to known purposes, would have resulted in a predictable result. Act. 3–9; Ans. 6–15; *see KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007) (“The combination of familiar

elements according to known methods is likely to be obvious when it does no more than yield predictable results.”).

Appellant’s argument that one of ordinary skill in the art would not have combined Levendis, Losch 658, and Riegel to arrive at a process in which “a water-insoluble inorganic salt is suspended in the monomer solution” as recited in claim 25 (Appeal Br. 18) also lacks evidentiary support and, therefore, is unpersuasive. *Johnston*, 885 F.2d at 1581. The argument also does not address the Examiner’s reasoning in support of the finding and rationale to combine the references. *Compare* Appeal Br. 18, with Act. 10–12 (providing a detailed finding of the limitation, as well as a rationale to combine).

Appellant lastly argues that a skilled artisan would not have combined Chinh with the other cited references because Chinh describes a fluidized bed polymerization instead of a dropletization polymerization. Appeal Br. 18, 37–38. As noted earlier, Appellant’s sole distinction is that Chihn does not use the phrase “dropletization” to describe its process. Open-ended claim 25 does not exclude a particular polymerization method.

Limitation: an “absence of hydrophobic inert solvents”

Appellant next argues that Levendis “fails to exclude a hydrophobic solvent” and, therefore, does not teach or suggest the process which “is performed in the absence of hydrophobic inert solvents” as recited in claim 25. Appeal Br. 18, 37. As the Examiner points out, however, Levendis does not require the use of hydrophobic solvents and describes an example solution in which no hydrophobic solvents were used. Act. 6. The Examiner finds that Levendis teaches using both hydrophobic and hydrophilic solvents. Ans. 9. Appellant does not dispute these findings and, in fact,

acknowledges that Levendis broadly “suggests the use of a solvent.” *Id.* at 18, 37; *see also* Reply Br. 2 (repeating the argument that Levendis teaches hydrophobic solvents). Appellant’s remaining argument that Losch 658 requires the use of a hydrophobic solvent (Appeal Br. 18) likewise does not address the Examiner’s findings with regard to Levendis. Appellant’s arguments, therefore, do not persuade us of reversible error in this aspect of the obviousness analysis.

The Examiner has shown that all the recited steps are known and “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416.

Accordingly, we sustain the rejection of claims 2–11, 22, 23, and 25–32 over Levendis, Losch 658, Riegel, Chinh, and Bruhns. *See* 37 C.F.R. § 41.37(c)(1)(iv).

2. *Rejection of claim 24 over Levendis, Losch 658, Riegel, Chinh, Bruhns, and Nishioka*

Appellant’s sole argument for claim 24 is that Nishioka “does not overcome the deficiencies of the four other cited references.” Appeal Br. 20. We sustain the rejection of claim 24 over Levendis, Losch 658, Riegel, Chinh, Bruhns, and Nishioka for the reasons provided *supra* with regard to claim 25. *See* 37 C.F.R. § 41.37(c)(1)(iv).

3. *Rejection of claims 2–11, 22, 23, and 25–30 under 35 U.S.C. § 103 as being unpatentable over Hennig, Anderson, Kimura, and Chinh*

Appellant argues against the rejection of claims 2–11, 22, 23, and 25–30 over Hennig, Anderson, Kimura, and Chinh as a group. Appeal Br. 21–

31. We select independent claim 25 as representative for the analysis. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Reference Henning

Appellant argues that Hennig teaches a powder bed polymerization process that differs from the recited method. Appeal Br. 23. Appellant, however, does not specify the particular step recited in claim 25 missing from the prior art teachings. For example, the Examiner finds that Hennig describes the use of orifices, as well as the use of a kettle/autoclave apparatus for polymerization, both of which correspond to the recited “dropletizing . . . via a dropletization plate” step. Act. 18–19. Appellant asserts that “the powder bed apparatus” is not a dropletization apparatus, but fails to provide any structural distinction between the apparatus or distinction between the processes. Appeal Br. 23–31, 39. Appellant supports its argument that the prior art process is distinguishable from claimed process with only a “bare assertion.” *Kemps*, 97 F.3d at 1430. Appellant, therefore, does not identify reversible error here.

Appellant also distinguishes Hennig by arguing that claim 25 “excludes a powder bed.” Appeal Br. 24. As noted earlier, claim 25 reciting a “process . . . comprising,” is an open ended claim and does not exclude a powder bed polymerization. Appellant’s argument that the Examiner reversibly erred in “eliminat[ing]” the powder bed is not based on the Examiner’s obviousness analysis, and, therefore, not persuasive. *Id.* at 24–25. We note that Appellant incorrectly reads claim 25 to require a method “consisting essentially of” the recited steps. *Id.* at 28. The plain language of claim 25, however, recites a “processing . . . comprising.” The recitation that “the contents of the dropletization tower consisting essentially of the

droplets, the carrier gas, and the water-absorbing beads” does not apply to the process steps.

Appellant’s remaining arguments are unpersuasive because they are not based on the claim language. For example, Appellant argues that Hennig does not teach a process where “each drop form[s] one particle,” “[e]ach droplet is formed individually,” or a process that “conducts a polymerization of droplets of the monomer solution solely in a gas phase as the droplets pass through a gas-filled dropletization tower.” *Id.* at 23, 24, 25; *see also id.* at 26–28, 30 (raising various other arguments not commensurate in scope with claim 25). Claim 25 does not recite these limitations and the arguments, therefore, are unpersuasive of reversible error.

Reference Kimura

Appellant next argues that the Examiner reversibly erred in finding that Kimura teaches “the use of calcium sulfate as a crosslinker.” Appeal Br. 28. Appellant cites to “Exhibit A” supporting the notion that calcium sulfate cannot perform as a crosslinker. *Id.* From the outset, the Evidence Appendix includes “A-5” and “A-7” and Appellant does not specify the particular piece of evidence in support of the argument or provide any pinpoint citation. *See id.* The argument, therefore, is unpersuasive as lacking factual support. Moreover, Appellant’s argument mischaracterizes and does not address the Examiner’s findings in support of the rejection. Specifically, the Examiner finds that Kimura “discloses water-absorbent resins having particle diameter of 100-600 micron, prepared by polymerizing an aqueous solution of water-soluble ethylenically unsaturated monomers, followed by cross-linking the produced water absorbent powder.” Act. 23. In any event, Appellant acknowledges that calcium sulfate may be used as a crosslinker –

only that it provides “no reasonable expectation of sufficiently crosslinking a monomer solution to form water-absorbing polymer beads of any practical use.” Appeal Br. 31. Given that Appellant fails to direct us to evidence supporting this argument and given that process claim 25 does not require any such practical use of the resultant polymer beads, the argument is not persuasive of reversible error.

Reference Chinh

Appellant repeats its arguments with regard to Chinh (e.g., Chinh does not use the phrase “dropletization,” etc.) (Appeal Br. 29–30), which we have addressed *supra* and do not repeat here. Appellant’s arguments with regard to the Examiner’s rationale to combine the references (e.g., Hennig describes a powder bed polymerization, whereas Chinh describes a fluidized bed polymerization) (Appeal Br. 29–31) are similar to those addressed with regard to rejection 1 *supra*. That is, the arguments attack the references individually and Appellant fails to support them with evidence. For example, Appellant’s argument that “[b]y simply dispersing small particles of a water-soluble inorganic salt in a monomer solution, polymerization would not yield the particle size [Chinh] desire[s]” is unsupported by evidence. Appeal Br. 31. This argument also does not address the combined teachings of the references but, instead, attacks Chinh individually. *See id.* Moreover, as with rejection 1, Appellant’s arguments do not identify reversible error in the Examiner’s finding that all the recited steps are known and that one skilled in the art would have been combined to yield a predictable result. *KSR*, 550 U.S. at 416.

Accordingly, we sustain the rejection of claims 2–11, 22, 23, and 25–30 over Hennig, Anderson, Kimura, and Chinh is sustained. *See* 37 C.F.R. § 41.37(c)(1)(iv).

4. *Rejection of claims 2–11, 22, 23, and 25–32 under 35 U.S.C. § 103 as being unpatentable over Hennig, Anderson, Kimura, Chinh, Schmid, and Bruhns*

Appellant’s arguments here are solely directed to Schmid and are unpersuasive for reasons similar to the arguments addressed *supra*. More specifically, Appellant argues that Schmid describes a spray polymerization and that Schmid does not teach or suggest a water-insoluble inorganic salt. Appeal Br. 32. Appellant’s arguments do not address the Examiner’s findings with regard to Schmid in support of the rejection. *Compare id.*, with Act. 25–26 (citing Schmid, for example, for the teaching of a polymerization process producing droplets of diameters of 50–100 microns and the use of inert gas in the process). We also note that Appellant’s arguments are not persuasive because the arguments attack the references individually and fail to provide supporting evidence. For example, Appellant argues, without addressing the combined prior art teachings and without factual support, that “a person skilled in the art would avoid adding a solid, water-insoluble salt to a monomer solution in a spray polymerization because the aerosol generator would be clogged by the solid particles.” Appeal Br. 32.

Therefore, we sustain the rejection of claims 2–11, 22, 23, and 25–32 over Hennig, Anderson, Kimura, Chinh, Schmid, and Bruhns.

5. *Rejection of claims 7–9 and 25–32 under 35 U.S.C. § 103 as being unpatentable over Hennig, Anderson, Kimura, Chinh, Losch 624, and Bruhns*

Appellant’s arguments here are directed solely to Losch 624 and are unpersuasive for reasons similar to the arguments addressed *supra*. More

specifically, Appellant acknowledges that Losch 624 describes “droplet formation through laminar jet disintegration.” Appeal Br. 34 (emphasis removed). Appellant asserts, without elaboration or evidentiary support, that this teaching “differs from a low-pressure drop over a bore.” *Id.* Such a conclusory statement lacking factual support is not persuasive of reversible error. We also note that Appellant’s arguments are not persuasive because they attack the references individually.

Thus, we sustain the rejection of claims 7–9 and 25–32 over Hennig, Anderson, Kimura, Chinh, Losch 624, and Bruhns.

6. *Rejection of claims 2–11, 22, 23, and 25–32 under 35 U.S.C. § 103 as being unpatentable over Levendis, Losch 658, Riegel, and Bruhns*

Appellant’s arguments here are directed to references addressed *supra* in rejection 1 and are unpersuasive for the same reasons. For example, Appellant repeats the argument that “Levendis is directed to a spray polymerization,” while acknowledging that Bruhns “is directed to a dropletization polymerization.” Appeal Br. 35. Appellant also repeats the argument that Levendis “provides no apparent reason to modify the reference from a spray polymerization to a dropletization polymerization.” *Id.* The obviousness analysis, however, requires no more than a showing that there is “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l*, 550 U.S. at 418. In this particular rejection, as well as the Examiner’s other rejections, the Examiner has shown that the prior art teaches familiar elements that the ordinarily skilled artisan would have combined using known methods to yield predictable results. *Id.* at 416.

Accordingly, we sustain the rejection of claims 2–11, 22, 23, and 25–32 over Levendis, Losch 658, Riegel, and Bruhns.

7. *Rejection of claim 24 over Levendis, Losch 658, Riegel, Bruhns, and Nishioka*

Appellant do not argue separately for the rejection of claim 24 over Levendis, Losch 658, Riegel, Bruhns, and Nishioka. Appeal Br. 36. We, therefore, sustain the rejection of claim 24 over Levendis, Losch 658, Riegel, Bruhns, and Nishioka for the reasons provided *supra*. See 37 C.F.R. § 41.37(c)(1)(iv).

CONCLUSION

The Examiner’s rejections are affirmed.

More specifically,

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
2–11, 22, 23, 25–32	103	Levendis, Losch 658, Riegel, Chinh, Bruhns	2–11, 22, 23, 25–32	
24	103	Levendis, Losch 658, Riegel, Chinh, Bruhns, Nishioka	24	
2–11, 22, 23, 25–30	103	Hennig, Anderson, Kimura, Chinh	2–11, 22, 23, 25–30	
2–11, 22, 23, 25–32	103	Hennig, Anderson, Kimura, Chinh, Schmid, Bruhns	2–11, 22, 23, 25–32	
7–9, 25–32	103	Hennig, Anderson, Kimura, Chinh, Losch 624, Bruhns	7–9, 25–32	
2–11, 22, 23, 25–32	103	Levendis, Losch 658, Riegel, Bruhns	2–11, 22, 23, 25–32	

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
24	103	Levendis, Losch 658, Riegel, Bruhns, Nishioka	24	
Overall Outcome:			2-11, 22- 32	

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).

AFFIRMED