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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT CONRAD

Appeal 2018-005805
Application 13/076,791
Technology Center 3600

Before MICHAEL J. FITZPATRICK, ANNETTE R. REIMERS, and
NATHAN A. ENGELS, *Administrative Patent Judges*.

REIMERS, *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 38 and 40–57. Claims 1–37 and 39 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Ball Horticultural Company. Appeal Brief (“Appeal Br.”) 2, filed Jan. 2, 2018.

CLAIMED SUBJECT MATTER

The claims are directed to cast pellets for planting seeds. Claim 38, reproduced below, is illustrative of the claimed subject matter:

38. A method of making a water-soluble cast pellet configured for planting and germinating plant seeds, the method comprising:
- (a) placing in a mold a mixture of one or more germinable plant seeds and a setable, water-soluble thermoplastic casting substance in a liquid state, wherein the setable, water-soluble thermoplastic casting substance comprises polyethylene glycol;
 - (b) causing the casting substance to set to a solid state to result in the cast pellet configured for planting and germinating plant seeds; and
 - (c) removing the cast pellet configured for planting and germinating plant seeds from the mold.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Garabedian	US 3,651,772	Mar. 28, 1972
Kouno	US 4,808,430	Feb. 28, 1989
McPherson	US 2006/0032120 A1	Feb. 16, 2006
Legro	US 2006/0150489 A1	July 13, 2006
Liste ²	DE 10 2004 040 726 A1	Feb. 23, 2006

REJECTIONS

- I. Claims 38, 40–43, 46–52, 54, and 56 are rejected under 35 U.S.C. § 103(a) as unpatentable over Liste and Kouno.

² The English translation for this reference has been provided by Appellant. See Liste 1 (“The information that follows was taken from the documents submitted by the Applicant.”); see also Appeal Br. 7 n.1. All citations to the Liste reference in this decision are to the “Commissioned Translation” provided by Appellant. See *id.*

- II. Claims 44 and 45 are rejected under 35 U.S.C. § 103(a) as unpatentable over Liste, Kouno, and Applicant's Admitted Prior Art ("AAPA").³
- III. Claim 53 is rejected under 35 U.S.C. § 103(a) as unpatentable over Liste, Kouno, and McPherson.
- IV. Claims 55 and 57 are rejected under 35 U.S.C. § 103(a) as unpatentable over Liste, Kouno, and Legro.
- V. Claims 38, 40–43, 46–52, 54, and 56 are rejected under 35 U.S.C. § 103(a) as unpatentable over Liste and Garabedian.
- VI. Claims 44 and 45 are rejected under 35 U.S.C. § 103(a) as unpatentable over Liste, Garabedian, and AAPA.
- VII. Claim 53 is rejected under 35 U.S.C. § 103(a) as unpatentable over Liste, Garabedian, and McPherson.
- VIII. Claims 55 and 57 are rejected under 35 U.S.C. § 103(a) as unpatentable over Liste, Garabedian, and Legro.

ANALYSIS

Obviousness over Liste and Kouno

Claims 38, 40–43, 46–52, 54, and 56

Claim 38 requires, among other things, “a setable, water-soluble thermoplastic casting substance in a liquid state, wherein the setable water-soluble thermoplastic casting substance comprises polyethylene glycol.” Appeal Br. 23 (Claims App.). The Examiner finds that “Liste discloses

³ The Examiner cites to paragraphs two through four of Appellant's Specification as being indicative of Applicant's Admitted Prior Art ("AAPA"). Non-Final Office Action ("Non-Final Act.") 6, dated Aug. 2, 2017.

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polylactic acid which is a water-soluble thermoplastic casting substance,” and that “it would have been obvious [to a skilled artisan] to use another known equivalent water-soluble thermoplastic casting substance such as polyethylene glycol.” Ans. 4; *see also* Non-Final Act. 3–4 (citing Liste ¶ 11).⁴ The Examiner also finds that a skilled artisan “would recognize both polyethylene glycol and polylactic acid to . . . be water-soluble[,] . . . thermoplastic[,] and . . . functional equivalents that would yield predictable results.” Ans. 5; *see also* Non-Final Act. 4.

Appellant contends that the Examiner “recognized the deficiency of the combination Liste and K[ou]no in not disclosing polyethylene glycol in the casting substance” and

attempted to gloss over this failing by stating “it would have been an obvious substitution of functional equivalent to substitute the polylactic acid with polyethylene glycol or use both polylactic acid with polyethylene glycol, since both are known water-soluble, biodegradable thermoplastics, since a simple substitution of one known element for another would obtain predictable results.”

Appeal Br. 11 (citing Non-Final Act. 5). However, according to Appellant, the Examiner does “not cite a reference disclosing any of these allegations.” *Id.*

In the Answer, the Examiner states that “Appellant has, up to th[is] point, failed to previously specifically request a cited reference to support the [E]xaminer’s allegation[] that polyethylene glycol and polylactic acid are functional equivalents.” Ans. 4–5. However, “[a]n examiner bears the initial burden of presenting a prima facie case of obviousness.” *In re Huai-Hung Kao*, 639 F.3d 1057, 1066 (Fed. Cir. 2011). In any event, even after

⁴ Examiner’s Answer (“Ans.”), dated Mar. 20, 2018.

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Appellant's Appeal Brief "request," the Examiner does not provide Appellant with a cited reference to support the proposition that polyethylene glycol and polylactic acid are functional equivalents. *See id.* Rather, the Examiner merely reiterates findings similar to those made in the Non-Final Office Action, namely, that a skilled artisan would recognize that polyethylene glycol and polylactic acid are both "water-soluble[,] . . . thermoplastic[,] and . . . functional equivalents that would yield predictable results" and that a skilled artisan "could have combined the elements as claimed by known methods with no change in their respective functions." Ans. 5; *see also* Non-Final Act. 3–4.

In this case, we agree with Appellant that the Examiner's finding that the polylactic acid of Liste is "functional[ly] equivalent" to the claimed polyethylene glycol is based on "unsupported" evidence. *See* Reply Br. 4; *see also* Appeal Br. 11.⁵ Stated differently, the Examiner does not provide sufficient evidence or technical reasoning to support the finding that the polylactic acid of Liste is "functional[ly] equivalent" to the claimed polyethylene glycol. *See* Non-Final Act. 3–4; *see also* Ans. 4–5. As such, the Examiner fails to establish by a preponderance of the evidence that polylactic acid and polyethylene glycol are "known equivalent water-soluble thermoplastic casting substance[s]." *See* Ans. 4–5; *see also* Non-Final Act. 4.

For these reasons, we do not sustain the Examiner's rejection of claims 38, 40–43, 46–52, 54, and 56 over Liste and Kouno.

⁵ Reply Brief ("Reply Br."), filed May 21, 2018.

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*Obviousness over Liste, Kouno, and any of AAPA, McPherson, or Legro
Claims 44, 45, 53, 55, and 57*

Claims 44, 45, 53, and 55 ultimately depend from claim 38. *See* Appeal Br. 23–25 (Claims App.). Independent claim 57 is directed to a method of making a water-soluble cast pellet and, similar to independent claim 38, requires “a setable, water-soluble thermoplastic casting substance in a liquid state, wherein the setable water-soluble thermoplastic casting substance comprises polyethylene glycol.” Appeal Br. 23, 26 (Claims App.). The Examiner does not rely on the teachings of AAPA, McPherson, or Legro to remedy the deficiencies discussed above. *See* Non-Final Act. 5–7. Accordingly, for reasons similar to those discussed above for claim 38 in view of Liste and Kouno, we do not sustain the Examiner’s obviousness rejections of claims 44, 45, 53, 55, and 57 over the various cited prior art references.

*Obviousness over Liste and Garabedian
Claims 38, 40–43, 46–52, 54, and 56*

The Examiner relies on the same unsupported findings as those discussed above in the rejection of claim 38 over Liste and Kouno. *See* Non-Final Act. 8–9. The Examiner does not rely on the teachings of Garabedian to remedy the deficiencies of Liste. *See id.* Accordingly, for reasons similar to those discussed above in view of Liste and Kouno, we do not sustain the Examiner’s rejection of claims 38, 40–43, 46–52, 54, and 56 over Liste and Garabedian.

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*Obviousness over Liste, Garabedian, and any of AAPA,
McPherson, and Legro*

Claims 44, 45, 53, 55, and 57

Claims 44, 45, 53, and 55 ultimately depend from claim 38. *See* Appeal Br. 23–25 (Claims App.). Independent claim 57 is directed to a method of making a water-soluble cast pellet and, similar to independent claim 38, requires “a setable, water-soluble thermoplastic casting substance in a liquid state, wherein the setable water-soluble thermoplastic casting substance comprises polyethylene glycol.” Appeal Br. 23, 26 (Claims App.). The Examiner relies on the same unsupported findings as those discussed above in the rejection of claim 38 over Liste and Garabedian. *See* Non-Final Act. 11–13. The Examiner does not rely on the teachings of AAPA, McPherson, or Legro to remedy the deficiencies of Liste. *See id.* Accordingly, for reasons similar to those discussed above for claim 38 in view of Liste and Garabedian, we do not sustain the Examiner’s obviousness rejections of claims 44, 45, 53, 55, and 57 over the various cited prior art references.

DECISION SUMMARY

Claim(s)	35 U.S.C. §	Basis/Reference(s)	Affirmed	Reversed
38, 40–43, 46–52, 54, 56	103(a)	Liste, Kouno		38, 40–43, 46–52, 54, 56
44, 45	103(a)	Liste, Kouno, AAPA		44, 45
53	103(a)	Liste, Kouno, McPherson		53
55, 57	103(a)	Liste, Kouno, Legro		55, 57
38, 40–43, 46–52, 54, 56	103(a)	Liste, Garabedian		38, 40–43, 46–52, 54, 56
44, 45	103(a)	Liste, Garabedian, AAPA		44, 45
53	103(a)	Liste, Garabedian, McPherson		53
55, 57	103(a)	Liste, Garabedian, Legro		55, 57
Overall Outcome				38, 40–57

REVERSED