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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JUSTIN HOLMES, MICHAEL MORRIS, JOHN HANRAHAN, DONAL KEANE, and MARK COPLEY

Appeal 2018-007995
Application 12/668,859
Technology Center 1700

Before JEFFREY R. SNAY, DEBRA L. DENNETT, and JANE E. INGLESE, *Administrative Patent Judges*.

SNAY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] requests our review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 151–158 under 35 U.S.C. § 103(a) as unpatentable over Landry (US 2006/0118490 A1, June 8, 2006) ("Landry") in combination with Noritake (JP 5-43217 A, February 23, 1993, as translated) ("Noritake"). We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

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[1] We use the word "Appellant" to refer to the "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies UNIVERSITY COLLEGE CORK – NATIONAL UNIVERSITY OF IRELAND, CORK, as the real party in interest (Appeal Br. 1).

We AFFIRM.

CLAIMED SUBJECT MATTER

Claim 151, as reproduced below from the Claims Appendix of the Appeal Brief,[2] is illustrative of the subject matter on appeal:

> Claim 151. Mesoporous silica microparticles produced by a method comprising:
>
> a. preparing a pre-sol solution comprising a silica precursor and a structure directing agent dissolved in a mixed solvent;
>
> b. base-catalyzing a hydrolysis and condensation reaction of the presolution at a temperature ranging from about -100°C to about 80°C to produce mesoporous silica microparticles having an average pore diameter;
>
> c. using the structure directing agent as a porogen to increase the size of pores in the microparticles; and
>
> d. treating the resulting mesoporous microparticles to enlarge the average pore diameter;
>
> wherein the microparticles are spherical with particle diameters that vary no more than about 5% from an average particle diameter and wherein the average particle diameter ranges from about 0.1 μm to about 50 μm, and the pores of the microparticles are arranged in a random direction.

Appellant represents that all of the appealed claims stand or fall together. Appeal Br. 4 ("For the purposes of this Appeal, claims 151–158

[2] Appellant presents a version of the claims, including claim 151, that includes After-Final amendments which were denied entry by the Examiner. *See* Advisory Action, May 12, 2017. However, the differences between the claims presented by Appellant and those which in fact are pending are not material to any issue raised in this appeal.

are under appeal and are submitted to stand or fall together."). We address claim 151, with the remaining claims standing or falling with that claim.

OPINION

Upon consideration of the evidence of record and each of Appellant's contentions as set forth in the Appeal Brief, as well as the Reply Brief, we determine that Appellant has not demonstrated reversible error in the Examiner's rejections (e.g., *see generally* Ans.). *In re Jung*, 637 F.3d 1356, 1365–66 (Fed. Cir. 2011) (explaining the Board's long-held practice of requiring Appellant(s) to identify the alleged error in the Examiner's rejection). We sustain the rejections for the reasons expressed by the Examiner in the Final Office Action and the Answer.

We add the following primarily for emphasis.

Relevant to Appellant's arguments on appeal, the Examiner finds that Landry discloses mesoporous inorganic oxide spheres having a "remarkable narrow particle size distribution" for use in chromatography, but does not specify that the particle diameters vary by no more than about 5% from the average. Final Act. 4. The Examiner finds that Noritake exemplifies silica particles having a coefficient of variation of 5% or less relative to the mean as being suitable for chromatography applications. *Id.* Appellant does not dispute these findings. *See Briefs generally*.

Appellant argues that one of ordinary skill would have been unable to apply the particle synthesis conditions of Noritake to that of Landry. Appeal Br. 8–11; Reply Br. 7–12. *See also* Declaration ("Decl."), October 17, 2016, ¶ 9 ("[T]he acid-catalyzed techniques used in Landry to form microparticles are incompatible with the base-catalyzed techniques used by Noritake."). However, as the Examiner explains (Ans. 9), Noritake is relied upon merely

as recognition in the art that a particle distribution in which particles varied 5% or less relative to the mean was desirable for chromatography purposes. Appellant acknowledges that a desired particle size distribution may be obtained through conventional separation techniques. Spec. 2 ("Conventionally to obtain a batch of particles in the 1 μm size range, size-monodisperse enough of UHPLC, it is necessary to separate out the desired particles which is a very time consuming process."). Whether Noritake employs a different particle synthesis technique does not negate the relied-upon teaching that it was desirable to provide chromatography particles having a size variance of 5% or less relative to the mean.

Appellant also argues that the Examiner improperly overlooked evidence of long-felt need in the art. Appeal Br. 6–7; Reply Br. 14–16. Appellant points to page 1 of the Specification for evidence of long-felt need. *Id.* at 6 n. 20. We see no such evidence at page 1 of the Specification. At page 2 of the Specification, however, it is stated that "it is difficult to form *high yields* of porous particles with mean diameters below 2μ that have a narrow size distribution," and that conventional particle separation techniques for that purpose were "time consuming." Spec. 2:11–16. These unsubstantiated statements are not persuasive evidence of a long-felt unmet need in the art. *See In re Kahn*, 441 F.3d 977, 990 (Fed. Cir. 2009 ("[O]ur precedent requires that the applicant submit actual evidence of long-felt need, as opposed to argument.").

For the foregoing reasons, Appellant does not identify error in the Examiner's rejection of claim 151. Accordingly, the rejection of claims 151–158 is sustained.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
151–158	103(a)	Landry, Noritake	151–158	

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)(1)(iv).

AFFIRMED