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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/784,942	03/05/2013	Justin C. Lytle	099270-US3	3526
26384	7590	01/30/2020	EXAMINER	
NAVAL RESEARCH LABORATORY ASSOCIATE COUNSEL (PATENTS) CODE 1008.2 4555 OVERLOOK AVENUE, S.W. WASHINGTON, DC 20375-5320			GOLDEN, CHINESSA T	
			ART UNIT	PAPER NUMBER
			1788	
			MAIL DATE	DELIVERY MODE
			01/30/2020	PAPER

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.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JUSTIN C. LYTLE, JEFFREY W. LONG, AMANDA JUNE
BARROW, MATTHEW PAUL SAUNDERS, DEBRA R. ROLISON, and
JENNIFER L. DYSART

Appeal 2019-002660
Application 13/784,942
Technology Center 1700

Before BEVERLY A. FRANKLIN, KAREN M. HASTINGS, and
N. WHITNEY WILSON,
Administrative Patent Judges.

FRANKLIN, *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 1, 3, 4, and 6–16. We have jurisdiction
under 35 U.S.C. § 6(b).

We AFFIRM.

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 the U.S.
Government as represented by the Secretary of the Navy. Appeal Br. 2.

CLAIMED SUBJECT MATTER

Claim 1 is illustrative of Appellant's subject matter on appeal and is set forth below:

1. A carbon nanofoam composite comprising:
a monolithic carbon foam of interconnected pores of ~ 50 - 300 nm in size with nanometric carbon walls having a thickness on the order of 20 nm, in a condition of having been made on carbon paper that has been plasma etched in the presence of air and water vapor.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Pekala	US 4,873,218	Oct. 10, 1989
Albert	US 7,005,181 B2	Feb. 28, 2006
Rotermund	US 2006/0014908 A1	Jan. 19, 2006
Li (as translated)	CN 101170137 A	Apr. 30, 2008

REJECTIONS

1. Claims 1, 3, 4, 6, and 7 are rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Albert in view of Li.
2. Claims 8, 9, 11–14, and 16 are rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Albert in view of Li in further view of Rotermund.
3. Claim 10 is rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Albert in view of Li in further view of Pekala.
4. Claim 15 is rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Albert in view of Li and Rotermund in further view of Pekala.

OPINION

For purposes of this appeal, we note that none of the claims are separately argued, and therefore we consider independent claim 1 as representative. The remaining claims stand or fall with claim 1, consistent with 37 C.F.R. § 41.37(c)(1)(iv) (2017).

Upon consideration of the evidence and each of the respective positions set forth in the record, we find that the preponderance of evidence supports the Examiner's findings and conclusion that the subject matter of Appellant's claims is unpatentable over the applied art. Accordingly, we sustain each of the Examiner's rejections on appeal essentially for the reasons set forth in the Final Office Action and in the Answer, and affirm. We add the following analysis.

Rejection 1

We refer to pages 3–5 of the Answer regarding the Examiner's statement of Rejection 1. Therein, the Examiner relies upon Albert for teaching the claimed elements except for the pore wall thickness on the order of 20 nm. The Examiner relies upon Li for teaching this claimed thickness. Ans. 3. With regard to the product by process limitation, the Examiner states that the product itself does not depend on the process of making it. Ans. 4.

We refer to Appellant's arguments on pages 3–5 of the Appeal Brief. Therein, Appellant first argues that the product-by-process limitation distinguishes the claims over the references. Appeal Br. 3–4. We are unpersuaded by this position for the following reasons.

Appellant states that the Declaration under 37 C.F.R. § 1.132 submitted on December 31, 2015 establishes that the claimed plasma etching treatment of carbon paper in the presence of air and water vapor is critical to obtaining certain desired characteristics of the foam. Appeal Br. 3. Appellant also states that paragraph 6 of the Declaration, which refers to the Lyle publication, shows that the plasma etching process is critical to obtaining the claimed combination of pore size. Reply Br. 1–2. However, paragraph 10 of the Declaration states a pore size “on the order of 100 nm and greater”. This is not commensurate in scope with the independent claim under consideration in this appeal. Furthermore, to the extent that the process achieves the claimed pore size and wall thickness, the combination of applied references meets this claim limitation as well. “Where a product-by-process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.” *In re Marosi*, 710 F.2d 799, 803 (Fed. Cir. 1983); *In re Thorpe*, 777 F.2d 695, 697 (Fed. Cir. 1985) (“If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.”). It is one thing to show that a process results in the claimed product, but another thing to establish an unobvious difference between the claimed product and the prior art product. As such, we are unpersuaded by this line of argument.

Appellant next argues that there is insufficient rationale for modifying Albert as proposed by the Examiner. Appeal Br. 3–4. Appellant submits that Albert’s process would tend to produce pores having a wall thickness

greater than that presently claimed, and that the cited portion of Li is silent with regard to the relationship of wall thickness on the properties mentioned in the rejection. Appeal Br. 4. We are unpersuaded by this line of argument for the reasons expressed by the Examiner on pages 10–11 of the Answer.

Appellant next argues that the references are not enabling. Appeal Br. 4. Appellant submits that the references as applied do not describe how one might obtain the claimed combination of pore size and wall thickness. However, the party alleging non-enablement bears the burden of proving non-enablement. *In re Antor Media Corp.*, 689 F.3d 1282, 1288–89 (Fed. Cir. 2012) (a publication is presumed to be enabling). In the instant case, an argument made by counsel in a brief does not substitute for evidence lacking in the record. *Estee Lauder, Inc. v. L'Oréal, S.A.*, 129 F.3d 588, 595 (Fed. Cir. 1997). It is noteworthy to mention that Li teaches, in paragraph [0015], a pore size from 2–50 nm and a pore wall thickness of from 2–50 nm. Thus, contrary to Appellant's position, the applied prior art indicates that one of ordinary skill in the art would have known how to obtain a pore size and wall thickness as encompassed by claim 1.

Lastly, Appellant argues superior and unexpected results. Appeal Br. 4–5. We are unpersuaded by the rebuttal evidence as the Declaration is not commensurate in scope with the claims as discussed, *supra*. Appellant can rebut a *prima facie* case of obviousness by showing “unexpected results,” *i.e.*, showing that the claimed invention possesses a superior property or advantage that a person of ordinary skill in the art would have found surprising or unexpected. *See In re Geisler*, 116 F.3d 1465, 1469 (Fed. Cir. 1997) (quoting *In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995)). However, the burden rests with Appellants to establish, *inter alia*, (1) that the

comparisons are to the disclosure of the closest prior art, and (2) that the supplied evidentiary showing is commensurate in scope with the claimed subject matter. *See In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972).

Rejections 2–4

Appellant does not separately argue Rejections 2–4 (Appeal Br. 1–5), so we affirm Rejections 2–4 for the same reasons that we affirm Rejection 1.

CONCLUSION

We affirm the Examiner’s decision.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 3, 4, 6, 7	103	Albert, Li	1, 3, 4, 6, 7	
8, 9, 11–14, 16	103	Albert, Li, Rotermund	8, 9, 11–14, 16	
10	103	Albert, Li, Pekala	10	
15	103	Albert, Li, Rotermund, Pekala	15	
Overall Outcome			1, 3, 4, 6–16	

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