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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONAS BANKAITIS and KARAN MEHROTRA

Appeal 2019-006635
Application 15/846,778
Technology Center 1700

Before TERRY J. OWENS, N. WHITNEY WILSON, and
BRIAN D. RANGE, *Administrative Patent Judges*.

WILSON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's November 28, 2018 decision to finally reject claims 16–21. 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 Corning Incorporated (Appeal Br. 1).

CLAIMED SUBJECT MATTER

Appellant's disclosure is directed to a thin sheet of fused silica having a major face surface area of 6π square inches (Abstract). Claim 16, which is reproduced below from the Claims Appendix, is illustrative of the claimed subject matter:

16. A sheet of fused silica comprising a thickness of less than 300 micrometers, a major face surface area of at least 6π square inches, a total thickness variation of less than 10 micrometers excluding edge roll off, a peak-to-valley waviness of less than 500 nanometers, and a root mean square roughness over a square millimeter of major surface of less than 100 nanometers.

REFERENCE

The prior art relied upon by the Examiner is:

Name	Reference	Date
Coresix Wafers	https://web.archive.org/web/20151121030045/https://coresix.com/products/wafers/	November 21, 2015

REJECTION

Claims 16–21 are rejected under 35 U.S.C. § 103 as unpatentable over Coresix Wafers.

DISCUSSION

The Examiner finds that Coresix Wafers discloses a wafer—or sheet—of fused silica having a thickness of 50 μm to 10 mm, a diameter of 25 mm to 450 mm, which corresponds to a major face surface area which overlaps with the amount set forth in the claims (6π square inches, or about 18.8 square inches) (Final Act. 2, citing Coresix Wafers 1). These dimensional ranges overlap with the claimed ranges and, therefore, render them prima

facie obvious (*id.*). With regards to the remaining limitations, the Examiner finds:

Coresix further teaches a total thickness variation of less than 2 μm and a root mean square roughness over a square millimeter of major surface of less than 2 \AA ; which would have either suggested or rendered obvious the ranges of the instant claims.

With regard to the sheet having a peak-to-valley waviness of less than 500 nanometers and a peak-to-valley waviness of less than 100 nanometers, Coresix teaches the wafer may be lapped or polished to a desired flatness or finish), so it would have been obvious to one of ordinary skill in the art at the time of invention to lap or polish the wafer to the desired peak-to-valley waviness (i.e., flatness or finish).

(Final Act. 3, internal citations omitted).

Appellant offers two arguments urging reversal of the rejection. First, Appellant argues that Coresix Wafers, on its face, does not actually disclose a wafer with the claim 16's recited properties, because the document is primarily a marketing document (Appeal Br. 4). In particular, Appellant relies on the following statement from Coresix Wafers: "Capabilities depend on material and substrate size. Actual capabilities for specific wafer available upon request" (Appeal Br. 4-5). Appellant does not dispute the Examiner's factual findings that Coresix Wafers discloses parameters for a wafer which overlap with the claimed parameters. However, Appellant asserts that because of the foregoing language regarding capabilities, a person of skill in the art would not necessarily have understood that Coresix Wafers could actually produce a wafer with the requisite properties (*id.*).

This argument is not persuasive of reversible error. As noted by the Examiner (Ans. 5), the test for obviousness is what the reference would have

suggested to a person of skill in the art. In this instance, Coresix Wafers describes a wafer which would meet the terms of the claims, thereby rendering those claims obvious. Regardless of whether a person of skill in the art might have thought that Coresix Wafers represents only a marketing pitch, it describes, and therefore suggests, a wafer with the claimed properties. “Even if a reference discloses an inoperative device, it is prior art for all that it teaches.” *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551 (Fed. Cir. 1989).

Appellant’s second argument is that Coresix Wafers is non-enabling with respect to a wafer having the claimed properties (Appeal Br. 6–8). Appellant argues that the language “Capabilities depend on material and substrate size. Actual capabilities for specific wafer available upon request” indicates that Coresix Wafers is expressly indicating that it cannot produce wafers with all of the properties listed in the document, thereby overcoming any presumption of enablement attached to the document (Appeal Br. 6). This argument is not persuasive, because it is overstating the significance of the “capabilities language” in the document. There is no evidence in the Coresix Wafers document itself that it is not enabling for any of the embodiments disclosed therein.

Thus, the burden is on Appellant to demonstrate that Coresix Wafers is not enabled with respect to the claimed invention. *In re Sasse*, 629 F.2d 675 (CCPA 1980). In order to do so, Appellant points to its Specification which states that it was very difficult to produce very thin, yet highly polished wafers (Appeal Br. 6, citing Spec. ¶ 6). Appellant further points to “the absolute lack of any evidence that Coresix is able to make silica wafers with the properties recited in claim 16.” This argument is also not

persuasive. First, as noted above, there is a presumption of enablement for the prior art. Thus, “an absolute lack of evidence” that Coresix Wafers is enabled (beyond Coresix Wafers itself) is not sufficient to show that the reference is not enabled. Second, although the Specification does describe some of the difficulties in producing very thin, highly polished wafers, these statements are very generalized and not at all tied to Coresix Wafers.

Accordingly, we conclude that Appellant has not met its burden of showing that Coresix Wafers is not enabled.

For the foregoing reasons, we sustain the rejection.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
16–21	103	Coresix Wafers	16–21	

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