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LEX IP MEISTER, PLLC 5180 PARKSTONE DRIVE, SUITE 175 CHANTILLY, VA 20151			MCALLISTER, STEVEN B	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte de CHRIS G.M. RIDDER

Appeal 2017-003909
Application 13/859,020
Technology Center 3700

Before MICHAEL L. HOELTER, ERIC C. JESCHKE, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

HOELTER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is a decision on appeal, under 35 U.S.C. § 134(a), from the Examiner's final rejection of claims 1–15. App. Br. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

THE CLAIMED SUBJECT MATTER

The disclosed subject matter “relates to the field of semiconductor processing and, more specifically, to wafer boats used in vertical furnaces.” Spec. 1:5–6. Apparatus claims 1 and 10 are independent. Claim 1 is illustrative of the claims on appeal and is reproduced below.

1. A wafer boat for holding a plurality of wafers in a vertically stacked and spaced relationship, comprising:
 - a top member;
 - a bottom member facing the top member; and
 - at least three vertical members extending between the top member and the bottom member,wherein the vertical members are provided with a plurality of protrusions, the protrusions configured to form a plurality of wafer accommodations at different vertical heights, the protrusions configured to be arranged in groups of at least two protrusions,
 - wherein a pitch of protrusions within a group has a first value and a pitch of two vertically adjacent protrusions that belong to different groups has a second value larger than the first value.

REFERENCES RELIED ON BY THE EXAMINER

Tanaka	US 5,492,229	Feb. 20, 1996
Masaki	JP 2000-232151A	Aug. 22, 2000

THE REJECTIONS ON APPEAL

Claims 1–6 and 8–15 are rejected under 35 U.S.C. § 103(a) as unpatentable over Tanaka.

Claim 7 is rejected under 35 U.S.C. § 103(a) as unpatentable over Tanaka and Masaki.

ANALYSIS

Independent claim 1 (and hence its dependent claims 2–9 and 11–15) includes the limitation “wherein a pitch of protrusions within a group has a first value and a pitch of two vertically adjacent protrusions that belong to different groups has a second value larger than the first value.” The Examiner correlates the recited “pitch” to dimensions W2 and D1 (*see* Fig.

7A of Tanaka) and dimensions W4 and D2 (*see* Fig. 9A of Tanaka). Final Act. 4; Ans. 7. Appellant argues, “W2, W4, D1 and D2 are not pitches of Claim 1.” App. Br. 7; Reply Br. 5 (both referencing Spec. 8:2–4).

Figures 7A and 9A of Tanaka are replicated below.

FIG. 7 A

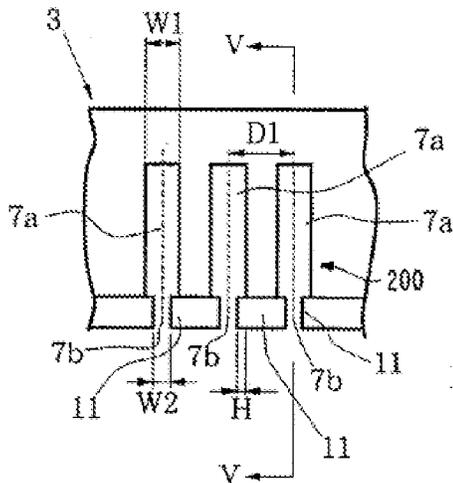


FIG. 9 A

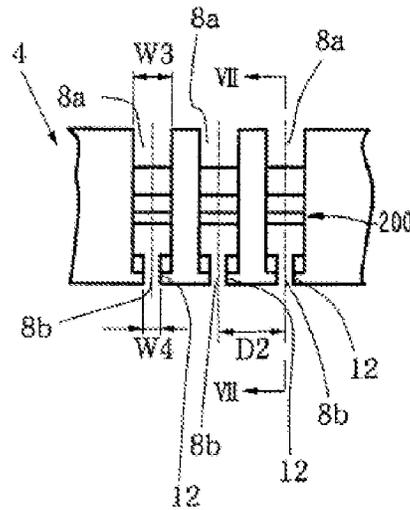


Figure 7A depicts dimensions W2 and D1, whereas Figure 9A depicts dimensions W4 and D2. Tanaka, col. 3, ll. 61–65, col. 4, ll. 4–7.

Appellant’s Specification states, “[t]he pitch is the repetitive mutual spacing of items. It is the spacing e.g. from the bottom of a recess or wafer (the top of a protrusion) to the bottom of an adjacent recess or wafer (the top of an adjacent protrusion).” Spec. 8:1–4; *see also* Spec., Fig. 1 (the drawing detail that identifies pitch P1 and P2). Accordingly, and based on this understanding of “pitch,” we agree with the Examiner that spacings/dimensions D1 and D2 (illustrated above) can properly be correlated to a “pitch” value. *See* Final Act. 4; Ans. 7. However, we also agree with Appellant that dimensions W2 and W4 (illustrated above) cannot. *See* App. Br. 7–8; Reply Br. 5–7. Thus, the Examiner’s reliance on

dimensions W2 and W4 as each depicting a “pitch” is not consistent with how the term “pitch” would have been understood by one skilled in the art upon reading Appellant’s Specification.¹ Consequently, and based on the record presented, we reverse the Examiner’s rejection of claims 1–9 and 11–15.

Claim 10 does not employ the term “pitch,” but instead recites, “wherein the recesses comprise a plurality of first recesses having a first height and a plurality of second recesses having a second height larger than the first height.” The Examiner initially correlates the corresponding “heights” (of slits/recesses 7, 8) to the same dimensions as above (i.e., W2, W4, D1, and D2). Final Act. 7–8; Ans. 8. Appellant contests the Examiner’s reliance on dimensions D1 and D2 as disclosing a height of a recess. App. Br. 11; Reply Br. 10. The Examiner thereafter provides an alternate rejection relying on Figure 7A of Tanaka, and more specifically only dimensions W1 and W2 depicted therein. Ans. 8. The Examiner states that these dimensions W1 and W2 have different values (7.0 and 3.2 mm respectively (*see* Tanaka 8:30–45)) and as such, “Tanaka teaches the last limitation of claim 10.” Ans. 8. Appellant does not respond to this alternate rejection, but instead repeats arguments regarding the Examiner’s reliance on dimensions D1 and D2 as above. *See* Reply Br. 10. We are unaware of

¹ The terms used in patent claims are not construed in the abstract, but in the context in which the term was presented and used by the patentee, as it would have been understood by a person of ordinary skill in the field of the invention on reading the patent documents. *See Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013); *see also In re ICON Health and Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc) (the specification is “the primary basis for construing the claims”).

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any error in the Examiner's alternate reliance solely on dimensions W1 and W2 as expressed. Accordingly, and based on the record presented, we sustain the Examiner's rejection of claim 10.

DECISION

The Examiner's rejection of claims 1–9 and 11–15 is reversed.

The Examiner's rejection of claim 10 is affirmed.

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-IN-PART