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54066	7590	09/18/2019	EXAMINER	
MURATA MANUFACTURING COMPANY, LTD. C/O KEATING & BENNETT, LLP 1800 Alexander Bell Drive SUITE 200 Reston, VA 20191			TSO, STANLEY	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* SHINICHIRO KUROIWA, KAZUO HATTORI,  
ISAMU FUJIMOTO, and YASUYUKI SEKIMOTO

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Appeal 2018-009028  
Application 15/067,882  
Technology Center 2800

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Before LINDA M. GAUDETTE, KAREN M. HASTINGS, and  
MERRELL C. CASHION, JR., *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> seeks our review under 35 U.S.C. § 134(a) of the Examiner's Final Rejection of claims 1–20 under 35 U.S.C. § 103 as being unpatentable over at least the basic combination of Yasutaka (JPH08330174 A, December 13, 1996; abstract as translated) with Kusano (US 2009/0190285 A1 pub. July 30, 2009)<sup>2</sup>.

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<sup>1</sup> Appellant is the Applicant, Murata Manufacturing Co., Ltd., which is also stated to be the real party in interest (Appeal Br. 2).

<sup>2</sup> The Examiner applied additional prior art in separate rejections of dependent claims 2, 3, 6, 11–13 and 16–20 (Final Action 8–15). A

We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We REVERSE.

Claim 1 is illustrative of the claimed subject matter (emphasis added to highlight a key disputed limitation):

1. An electronic component comprising:  
a component main body in which an internal conductor is embedded;  
and  
an outer electrode provided on an outer surface of the component main body; wherein the component main body includes an end surface on which the internal conductor is exposed, and a main surface that is continuous with the end surface and intersects with the end surface;  
the outer electrode includes an end surface covering portion connected to the internal conductor by covering at least a portion of the internal conductor exposed on the end surface, and a main surface covering portion that covers at least a portion of the main surface;  
at least a portion of an exposed surface of the main surface covering portion includes a Sn plating layer;  
*at least a portion of an exposed surface of the end surface covering portion includes a Sn-Ni layer containing an intermetallic compound of Sn and Ni; and*  
*at least a portion of the Sn-Ni layer is disposed underneath the Sn plating layer.*

## ANALYSIS

The Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of

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discussion of these rejections is not necessary for the disposition of this appeal.

obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), quoted with approval in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

After review of the respective positions provided by Appellant and the Examiner, we conclude that the preponderance of the evidence supports Appellant’s position that the Examiner has not established a prima facie case of obviousness for substantially the reasons set forth by Appellant in the Briefs. Accordingly, we reverse the Examiner’s § 103 rejections of all the claims on appeal.

Specifically, a preponderance of the evidence supports Appellant’s position that the proposed modification of Yasutaka to replace its conductive (low electrical resistance) silver electrode layer 44 with Kusano’s resistive electrode layer made of In-Sn would be based on improper hindsight reconstruction for the reasons discussed by Appellant in the Briefs (Appeal Br. 7, 8, 15; Reply Br. 2–5). The fact finder must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. at 421 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966) (warning against a “temptation to read into the prior art the teachings of the invention in issue”)).

Furthermore, the Examiner relies on a combination of multiple layers that include Yasutaka’s layers Ni plating layer 45, Sn-Ni intermetallic 47 and Kusano’s In-Sn layer 8 (which will generate a Ni-Sn intermetallic compound when reacted with Ni) to be the “Si-Ni layer” positioned as recited in claim 1 (Ans. 5, 9, 10 (annotated Fig. 2 of Yasutaka)). We agree with Appellant that the broadest reasonable interpretation of “a Si-Ni layer” as recited in claim 1 and consistent with the Specification does not

encompass the Yasutaka/Kusano combination of layers as depicted in the Examiner's annotated Fig. 2 of Yasutaka (Appeal Br. 13, 14; Reply Br. 6, 7).

Because the Examiner's reliance on multiple layers that include Yasutaka's layers 45, 47 and Kusano's layer 8 as the "Si-Ni layer" as recited in claim 1 is inconsistent with the meaning of "a layer of Si-Ni" as used in the Specification (e.g. ¶¶ 38, 46, 47, 49, 76, 95 and illustrated in, e.g., Figs. 2A, 8), we agree with Appellant that the Examiner's interpretation is unreasonably broad.

As stated in *In re Smith*,

The correct inquiry in giving a claim term its broadest reasonable interpretation in light of the specification is not whether the specification proscribes or precludes some broad reading of the claim term adopted by the examiner. And it is not simply an interpretation that is not inconsistent with the specification. It is an interpretation that corresponds with what and how the inventor describes his invention in the specification, *i.e.*, an interpretation that is "consistent with the specification."

*In re Smith Int'l, Inc.*, 871 F.3d 1375, 1382–83 (Fed. Cir. 2017) (quoting *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997)).<sup>3</sup>

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<sup>3</sup> "[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification." *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1256 (Fed. Cir. 2007) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). See also *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (The scope of the claims in patent applications is not determined solely on the basis of the claim language, but upon giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art.); *Cf. Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) ("[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" (internal citation omitted)).

We agree with Appellant that, in light of the Specification description of the invention, which only describes and depicts a single layer of Si-Ni as being both a portion of an exposed surface and a portion disposed underneath the Sn plating layer (e.g. Figs. 2A, 8; ¶ 38), the Examiner's reliance on multiple layers of a Yasutaka/Kusano combination to teach or suggest the Si-Ni layer as recited in claim 1 is unfounded.

The Examiner does not proffer sufficient reasoning or rely upon any other reference to cure this deficiency.

Accordingly, we reverse the § 103 rejections of claims 1–20 which all rely upon an impermissible hindsight reconstruction of Yasutaka based on Kusano as well as the Examiner's flawed interpretation of the claim language.

#### DECISION

<b>Claims Rejected</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 4, 5, 7–10, 14 and 15	§ 103 Yasutaka and Kusano		1, 4, 5, 7–10, 14 and 15
2 and 3	§ 103 Yasutaka, Kusano, and Sterrett		2 and 3
6, 12, and 13	§ 103 Yasutaka, Kusano and Moon		6, 12, 13
11	§ 103 Yasutaka, Kusano and Chae		11
16	§ 103 Yasutaka, Kusano and Lee		16

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<b>Claims Rejected</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
17 and 18	§ 103 Yasutaka, Kusano and Nishimura		17, 18
19 and 20	§ 103 Yasutaka, Kusano and Fujii		19, 20
<b>Overall Outcome</b>			1-20

The Examiner's § 103 rejections of all the claims on appeal are reversed.

REVERSED