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Cozen O'Connor 277 Park Avenue, 20th floor NEW YORK, NY 10172			PATEL, AMAL A	
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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* GERD ELBINGER, KLAUS MÜLLER,  
and GERHARD RÖTTER

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Appeal 2016-004648  
Application 12/867,347<sup>1</sup>  
Technology Center 2800

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Before LINDA M. GAUDETTE, JULIA HEANEY, and  
DEBRA L. DENNETT, *Administrative Patent Judges*.

DENNETT, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>2</sup>

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a rejection of claims 13–21. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> Appellants identify Siemens AG as the real party in interest. Appeal Br. 2.

<sup>2</sup> In our Opinion, we refer to the Specification filed August 12, 2010 (Spec.); the Final Action electronically mailed on March 23, 2015 (“Final Act.”); the Advisory Action electronically mailed on May 29, 2015 (“Advis. Act.”); the Appeal Br. filed September 9, 2015 (“Appeal Br.”); the Examiner’s Answer electronically mailed on February 3, 2016 (“Ans.”); and the Reply Brief filed April 1, 2016 (“Reply Br.”).

The claims are directed to a device for identification of an object having an at least partially metallic surface. Claim 13, reproduced below with the disputed limitation emphasized, is illustrative of the claimed subject matter:

13. A device for identification of an object having an at least partially metallic surface, comprising:

an identification device; and

*an antenna* at least indirectly mounted on the at least partially metallic surface and *extending above and away from the at least partially metallic surface*, the antenna being a helical monopole; and

one of (i) a flat electrical contact and (ii) close capacitive coupling produced between the metallic surface and the antenna by a contact pressure on the metallic surface;

wherein a polarization axis of the antenna is one of directed away from the at least partially metallic surface and disposed at right angles to the at least partially metallic surface.

Appeal Br. 6 (Claims App'x).

#### REFERENCES

The Examiner relies on the following prior art in rejecting the claims:

Savage et al. ("Savage")	US 2003/0156033 A1	Aug. 21, 2003
Yonezawa et al. ("Yonezawa")	US 6,812,707 B2	Nov. 2, 2004
Sakama et al. ("Sakama")	US 2006/0022056 A1	Feb. 2, 2006
Covannon et al. ("Covannon")	US 2007/0008112 A1	Jan. 11, 2007

## REJECTIONS

Claims 13–21 stand rejected under 35 U.S.C § 103(a) as follows: (1) claims 13 and 18–21 over Sakama as evidenced by Yonezawa or alternatively Covannon; and (2) claims 14–17 over Sakama in view of Savage. Final Act. 2, 4.

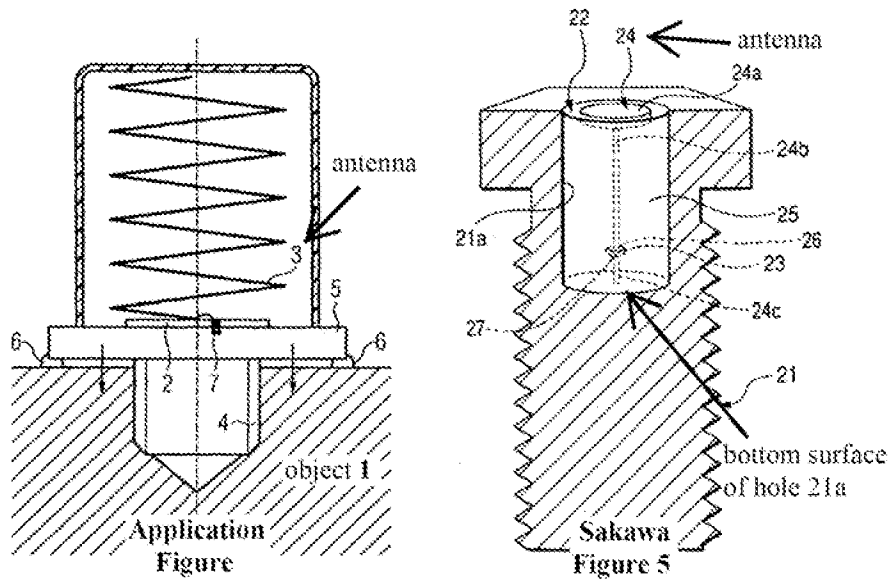
## OPINION

Appellants argue the claims as a group. Appeal Br. 4–5. We select claim 13, the sole independent claim, as representative of the group. Claims 14–21 will stand or fall with claim 13. 37 C.F.R. § 41.37(c)(1)(iv).

With respect to claim 13, the Examiner finds that Sakama teaches all limitations of the claim, except that Sakama does not explicitly teach the monopole antenna may be helical. Final Act. 2–3. The Examiner finds that forming antennas in a helical formation is old and well-known in the art, citing Yonezawa and Covannon. *Id.* at 3. Appellants do not dispute the Examiner’s finding regarding helical antennas. *See* Appeal Br. *generally*.

The primary issue on appeal is the interpretation of the claim language requiring an antenna “extending above and away from the at least partially metallic surface,” particularly the meaning of “the at least partially metallic surface.”

To assist in our discussion of the issue, annotated versions of the Figure of the Application and Sakama’s Figure 5 are provided below:



The Figure of the Application is an illustration of a schematic block diagram of the device in accordance with an embodiment of the invention. Spec. 3. The Figure shows object 1 with an at least partially metallic surface. *Id.* An antenna 3 is mounted at least indirectly on the metallic surface. *Id.*

Figure 5 of Sakama shows a radio frequency IC tag mounted in a structure according to an embodiment of Sakama's invention. Sakama ¶ 14. Element 21 is a bolt, element 21a is a hole in the bolt, and element 24 (including 24a, 24b, and 24c) is an antenna. *Id.* ¶ 31.

The Examiner finds that the bottom surface of hole 21a of Sakama is “an at least partially metallic surface” as recited in claim 13. Advis. Act. 2.<sup>3</sup>

<sup>3</sup> The Examiner concludes that “at least” suggests a minimum of partially metallic surfaces, i.e., that many such surfaces may be present. Ans. 2. We do not agree with the Examiner's reasoning. Instead, we agree with Appellants that “the at least partially metallic surface” requires the surface to be partially or entirely metallic. See Reply Br. 2 (arguing that “at least” speaks to the property of the metallic surface as opposed to the quantity of such surface). However, claim 13 does not limit the object of the claimed

Consequently, the Examiner finds that the antenna extends above and away from the at least partially metallic surface (the bottom surface of hole 21a), as required by claim 13. *Id.* The Examiner finds that the metallic *sides* of hole 21a of Sakama are not part of “the at least partially metallic surface.”  
Ans. 2.

Appellants argue that the Examiner “has overlooked the notion that the sides of the hole 21a are also metallic and, thus, violate the requirement for the antenna to extend above and away from the metallic surface.”

Appeal Br. 3–4 (arguing that in the Sakama Figure 5 embodiment, Sakama’s antenna is arranged and extends parallel to the metallic *sides* of the bolt); *see also* Reply Br. 2. Appellants then argue that the bottom surface and sides of hole 21a in Sakama form *one continuous surface*, and, as the metallic sides are part of the continuous inner surface of the bolt and the antenna extends parallel to the sides, the antenna does not meet claim 13’s requirements.  
Reply Br. 2–4.

Appellants’ argument is not persuasive because it is based on an overly narrow interpretation of claim 13 that is not supported by the language of the claim itself or the Specification.

“During examination, ‘claims . . . are to be given their broadest reasonable interpretation consistent with the specification, and . . . claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art.’” *See In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (quoting *In re Bond*, 910 F.2d 831, 833 (Fed. Cir. 1990)). Although a specification may describe very

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device to having only one partially metallic surface. This conclusion does not alter the outcome in this case.

specific embodiments of an invention, our reviewing court has repeatedly warned against confining the claims to those embodiments. *See In re Bigio*, 381 F.3d 1320, 1325–26 (Fed. Cir. 2004).

Appellants’ argument is based on an interpretation of claim 13 as requiring that the antenna extend above an entire upper surface of an object, as illustrated in the Figure. Claim 13, however, does not require that the antenna extend above *all* partially metallic surfaces. Nor does the Specification support such a narrow interpretation of claim 13.

The Specification states:

[I]t will be understood that various omissions and substitutions and changes in the form and details of the devices illustrated, and in their operation, may be made by those skilled in the art without departing from the spirit of the invention. For example, it is expressly intended that all combinations of those elements which perform substantially the same function in substantially the same way to achieve the same results are within the scope of the invention. Moreover, it should be recognized that structures and/or elements shown and/or described in connection with any disclosed form or embodiment of the invention may be incorporated in any other disclosed or described or suggested form or embodiment as a general matter of design choice.

Spec. 4–5. Thus, the Specification does not support a construction of claim 13 that is limited to the illustrated embodiment.

We are not persuaded that the ordinarily-skilled artisan would view the bottom surface of hole 21a in Sakama as being part of a single continuous surface that includes the side wall. *See Reply Br. 2–4*. Although Sakama does not discuss the bottom surface of hole 21a, the reference refers to the “bottom portion” of the outer casing to distinguish it from the sides of the outer casing. *See Sakama ¶¶ 19, 21*. Thus, it was reasonable for the

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Examiner to determine that the bottom surface of hole 21a meets the claim 13 limitation of “an at least partially metallic surface” and, therefore, that the antenna of Sakama extends “above and away” from the bottom surface of hole 21a, meeting the requirement of claim 13. *See* Appeal Br. 6 (Claims App’x).

Because Appellants have not identified reversible error in the Examiner’s obviousness rejection, we sustain the rejection of claim 13. We also sustain the Examiner’s rejections of claims 14–21, which fall with claim 13.

#### DECISION

For the above reasons, the Examiner’s rejection of claims 13–21 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) (2013).

AFFIRMED