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14/996,561	01/15/2016	Noboru SHIOKAWA	740630-MM0006	4826

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte NOBORU SHIOKAWA

Appeal 2018-006245
Application 14/996,561
Technology Center 2800

Before GEORGE C. BEST, N. WHITNEY WILSON, and JEFFREY R. SNAY, *Administrative Patent Judges*.

BEST, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. §134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1, 3, and 4 of Application 14/996,561. Final Act. (August 3, 2017). We have jurisdiction under 35 U.S.C. § 6(b).

For the reasons set forth below, we ***reverse***.

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[1] We use the word "Appellant" to refer to "Applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies Murata Manufacturing Co., as the real party in interest. Appeal Br. 2.

BACKGROUND

The ’561 Application describes a coil component. Spec. ¶ 2. Any conventional coil component which is shunt connected and mounted on a signal line of the substrate, generates a resonance in a high frequency band due to the coil portion wound around the winding core portion. *Id.* ¶ 4. This results in signal quality deterioration. *Id.* The apparatus described in the ’561 Application is said to suppress deterioration in the propagation characteristics of the signal line. *Id.* ¶ 5.

Claim 1 is representative of the ’561 Application’s claims and is reproduced below from the Claims Appendix of the Appeal Brief.

> 1. A coil component comprising:
>
> a winding core portion;
>
> a first flange portion and a second flange portion disposed on opposite ends of the winding core portion;
>
> electrodes disposed on the first flange portion and the second flange portion, respectively;
>
> a first coil portion and *a second coil portion connected electrically in series between the electrode of the first flange portion and the electrode of the second flange portion* and connected to each other in series; and
>
> a projection portion disposed on an end surface of the first flange portion on the side opposite to the winding core portion, wherein
>
> > the first coil portion is disposed on the winding core portion,
> >
> > *the second coil portion is disposed on the projection portion*, and
> >
> > the first coil portion has an inductance value different from an inductance value of the second coil portion.

Appeal Br. 9 (emphasis and some indentation supplied).

REJECTION

On appeal, the Examiner maintains the following rejection:

Claims 1, 3, and 4 are rejected under 35 U.S.C. § 103 as unpatentable over the combination of Ukawa[2] and Hatakenaka.[3] Final Act. 3 – 5.

DISCUSSION

Appellant argues for the reversal of the rejection of claims 1, 3, and 4 on the basis of the limitations in claim 1. Accordingly, we select claim 1 as representative of the claims on appeal. 37 C.F.R. § 41.37(c)(1)(iv).

Appellant presents three arguments for reversal of the rejection of claim 1: (1) Ukawa does not describe the claimed second coil portion, Appeal Br. 3 – 5; (2) the combination of Ukawa and Hatakenaka would not result in a second coil connected electrically in series between electrodes and disposed on a projection portion, *id.* at 5 – 6; and (3) the combination of features of the claims provides a benefit not contemplated by Ukawa and Hatakenaka, *id.* at 6 – 7. We address these arguments *seriatim*.

First, in rejecting claim 1, the Examiner found that Ukawa describes a coil component comprising a first coil portion and a second coil portion electrically connected to each other in series. Final Act. 3 (citing Ukawa Fig. 1). The Examiner further found that Ukawa describes a projection portion disposed on an end surface of the first flange portion on the side opposite to the winding core portion wherein the second coil portion is disposed on the projection portion. *Id.*

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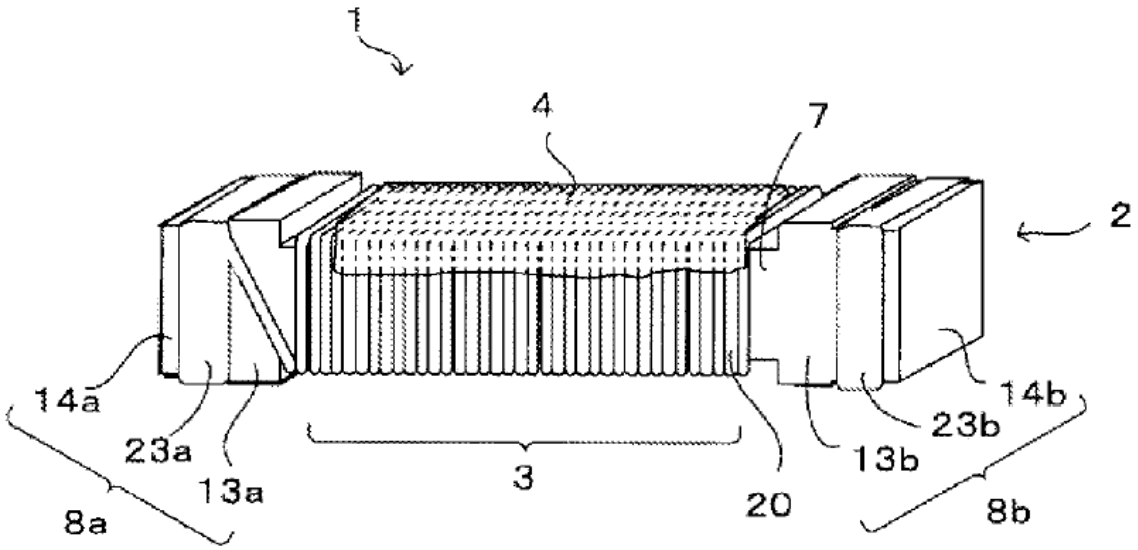
[2] US 2011/0248810 A1, published October 13, 2011.

[3] US 5,787,571, issued August 4, 1998.

For ease of reference, we reproduce Ukawa's Figures 1 and 2 below.



Ukawa's Figure 1 is a schematic structural view of a wire-wound coil. Ukawa ¶ 12.

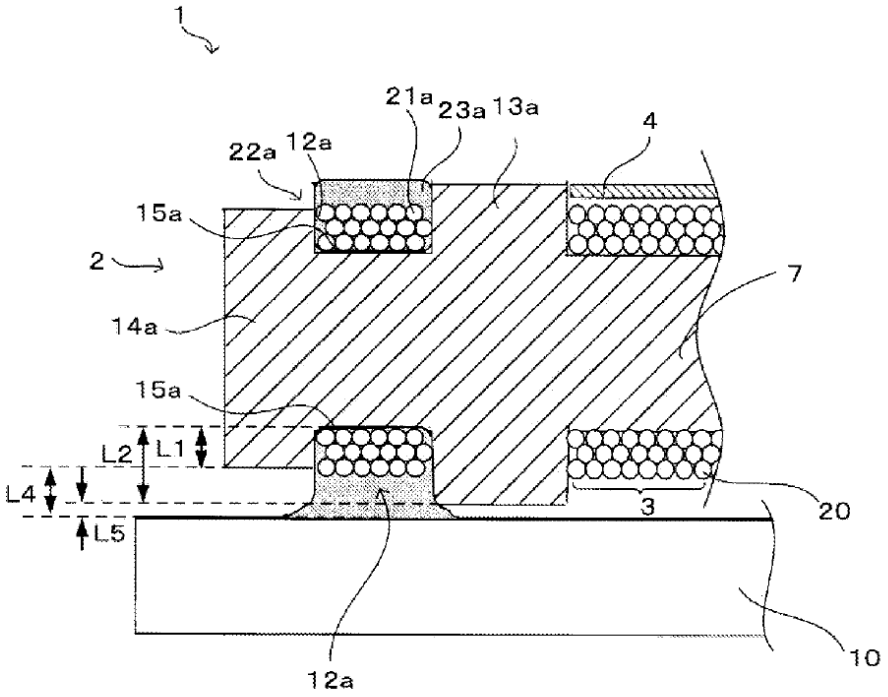


FIG.2

Ukawa's Figure 2 is a partial sectional view of the wire-wound coil of Figure 1. Ukawa ¶ 13.

The Examiner specifically found that Ukawa describes a coil component comprising a first coil portion (20) and a second coil portion (22a, 22b) electrically connected between the electrode adjacent of the first flange portion (13a) and the electrode adjacent of the second flange portion (13b) and connected to each other in series and a projection portion (15a, 15b) disposed on the end surface of the first flange portion on the side opposite to the winding core portion. Final Act. 3. The Examiner further found that the second core portion (22a, 22b) is disposed on the projection portion (15a, 15b). *Id.*

Appellant argues that the Examiner's finding that one of Ukawa's second winding portions 22a or 22b corresponds to the claimed second coil portion is erroneous. Appeal Br. 3 – 5. In making this argument, Appellant points to Ukawa's description of second winding portions 22a and 22b as soldered to form a solder electrodes 23a and 23b. *Id.* at 4. Appellant asserts that

> each of the second winding portions 22a and 22b combines with solder such that they are physically and electrically connected to form integral single electrodes 23a and 23b, respectively. Accordingly, Ukawa's second winding portions 22a and 22b are parts of the electrodes 23a and 23b, respectively, and thus neither second winding portion 22a nor second winding portion 22b forms a second coil portion that is connected electrically in series with a first coil portion between electrodes as claimed.

Id.

The Examiner responds:

> [A]lthough Ukawa teaches solder electrodes (23a, 23b) formed by soldering the second winding portions (22a, 22b)[, t]his does not negate the fact that the "second winding portion" is still taught are disclosed since Ukawa specifically labels and

> discusses "second winding portions" (22a, 22b) in addition to the solder electrodes (23a, 23b).

Answer 7.

We agree with Appellant that the Examiner erred in finding that Ukawa's second winding portions correspond to the claimed second coil portion. While the wire forming Ukawa's second winding portions is in the form of a coil, the wire is then soldered together in such way that each wrap of the coil has the same potential and the wire does not function as a coil. A person of ordinary skill in the art, therefore, would not regard Ukawa's second winding portions as describing or suggesting the claimed second coil portion.

In view of the foregoing, we reverse the rejection of claim 1. We, therefore, also reverse the rejection of claims 3 and 4.

Second, Appellant argues that the Examiner erred by finding that the combination of Ukawa and Hatakenaka describes or suggests the claimed "***second coil portion connected electrically in series between electrodes and disposed on the projection portion on the side opposite to the winding core portion***." Appeal Br. 5 – 6. Because we have already determined that the Examiner erred in finding that the combination of Ukawa and Hatakenaka describes or suggests the claimed second coil portion, we need not address this argument. We, therefore, do not express any opinion regarding the question of whether the Examiner reversibly erred in finding that the combination of Ukawa and Hatakenaka describes or suggests the claim limitations argued by Appellant.

Third, Appellant argues that the claimed coil component provides unexpected benefits relative to the prior art. Appeal Br. 6 – 7.

The Examiner responds that

> [t]he combination of Ukawa in view of Hatakenaka was correctly cited as including all these features. Thus, the benefits of these features would not have been unexpected, since a person of ordinary skill routinely considers parameters including these benefits such as the number of coils, size aof projections and core winding portions.

Answer 7 – 8.

The Examiner's response to Appellant's argument goes too far. In essence, the Examiner is asserting that any time there is an adequate prima facie case of obviousness, the claimed invention cannot provide any unexpected benefits. This is not the legally correct.

When an applicant argues that the claimed invention provides unexpected benefits or surprising results, an examiner first must determine whether these unexpected benefits or surprising results actually exist[4] and are commensurate in scope[5] with the claims. If this is so, then the presumption of unpatentability created by the prima facie case of obviousness dissolves and all of the evidence must be weighed together to

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[4] [F]or a showing of "unexpected results" to be probative evidence of non-obviousness, it falls upon the applicant to us at least establish: (1) that there actually is a difference between the results obtained through the claimed invention and those of the prior art, and (2) that the difference actually obtained would not have been expected by one skilled in the art at the time of the invention.

In re Freeman, 474 F.2d 1318, 1324 (CCPA 1973) (citations omitted).

[5] *See, e.g.*, *In re Peterson*, 315 F.3d 1325, 1330 – 31 (Fed. Cir. 2003) ("[T]he applicant's showing of unexpected results must be commensurate in scope with the claimed range.").

reach a final conclusion regarding the obviousness of the claim in question. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

In the case of the ’561 Application, the Examiner failed to follow this procedure. This provides a second, independent, reason for reversing the rejection of claims 1, 3, and 4.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1, 3, 4	103	Ukawa, Hatakenaka		1, 3, 4

REVERSED