

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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***Ex parte*** TSUTOMU IGARASI

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Appeal No. 2001-2649  
Application No. 09/358,926

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ON BRIEF

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Before HAIRSTON, FLEMING, and GROSS, ***Administrative Patent Judges.***

FLEMING, ***Administrative Patent Judge.***

***DECISION ON APPEAL***

This is a decision on appeal from the final rejection of claims 1, 3 and 4, all of the claims pending in the present application. Claim 2 has been canceled.

***Invention***

The invention relates to a no-crimp electrical connector for connecting stranded wires to an end terminal including a conductive end terminal having an integral bullet-shaped wire splaying end and an end terminal end. See page 1 of Appellant's

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specification. Referring to Figure 1, a no-crimp electrical connector incorporating the invention includes an end terminal 10 formed integrally with a bullet-shaped conductive member 11 and a hollow internally threaded female connector member 12 securely secured to the conductive end terminal by having portions thereof molded in the internal annular groove 13. See page 3 of Appellant's specification. Male connector member 16 is provided with a throughbore 21. Throughbore 21 has a portion 22 which is conically shaped to define a wire clamping space between it and the bullet-shaped member 11 for receiving wire ends which have been splayed into the space by the bullet-shaped end upon insertion of the wire in the direction indicated in Figure 3. The clamped condition is achieved by relatively rotating the hollow internally threaded female connection member 12 relative to the rotation of the male connector member 16 in the directions indicated by the arrows in Figure 4. See page 4 of Appellant's specification.

Claims 1 and 4 present in the application are reproduced as follows:

1. A no-crimp electrical connector for connecting a stranded or lower gauge solid wire electrical wire to an end terminal, comprising:

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a conductive end terminal having an integral bullet-shaped wire-splaying end, and an end terminal end selected from a ring and a spade,

a conductive hollow, internally threaded female connector member integral with said conductive end terminal and housing said bullet-shaped wire splaying end,

a male connector member having an externally threaded surface for threaded engagement with said internally threaded female connector member, said male connector member having a throughbore, said throughbore having a first portion which is conically shaped to define a wire clamping space for wire ends splayed by said bullet-shaped end upon relative rotation between said female and male connection members.

4. An electrical connector assembly for manually connecting a stranded or lower gauge solid wire electrical wire to a selected one of a ring or spade end terminal, comprising:

a first connector part comprising a conductive bullet-shaped wire-splaying member, a selected one of said end terminals, and a hollow internally threaded female connector member selected to said conductive end terminal and housing said bullet-shaped wire splaying end, and

a second connector part comprising a male connector member having an externally threaded surface for threaded engagement with said internally threaded female connector member, said male connector member having a throughbore, said throughbore having a portion which is conically shaped to define a wire clamping space for wire ends splayed by said bullet-shaped end upon relative rotation between said female and male connection members.

### **References**

The references relied on by the Examiner are as follows:

Wening	3,790,920	Feb. 5, 1974
Lienard	FR 0846809	Sep. 26, 1939

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**Rejection at Issue**

Claims 1, 3 and 4 stand rejected under 35 U.S.C. § 103 as being unpatentable over Lienard and Wening.

Throughout the opinion, we will make reference to the briefs<sup>1</sup> and the answer for the respective details thereof.

**OPINION**

With full consideration being given the subject matter on appeal, the Examiner's rejection and the arguments of Appellant and Examiner, for the reasons stated *infra*, we reverse the Examiner's rejection of claims 1 and 3 under 35 U.S.C. § 103 and we affirm the Examiner's rejection of claim 4 under 35 U.S.C. § 103.

**A. Rejection of Claims 1 and 3 under 35 U.S.C. § 103**

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). *See also In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can

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<sup>1</sup> Appellant filed an appeal brief on January 12, 2001. Appellant filed a reply brief on May 22, 2001. The Examiner mailed an Office communication on June 22, 2001, stating that the reply brief has been entered and considered.

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satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. **In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellant. **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. **See also Piasecki**, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and arguments." **Oetiker**, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." **In re Lee**, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). With these principles in mind, we commence review of the pertinent evidence and arguments of Appellant and Examiner.

Appellant argues that there is no teaching or suggestion to make the Lienard female part 1 integral with the Lienard cone 3

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and Lienard threaded member 2 to obtain Appellant's claimed structural limitation of "a conductive hollow, internally threaded female connector member integral with said conductive end terminal and housing said bullet-shaped wire splaying end" as recited in Appellant's claim 1. See pages 4 and 5 of the appeal brief and page 2 of the reply brief.

As pointed out by our reviewing court, we must first determine the scope of the claims. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Our reviewing court also states in *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), that "claims must be interpreted as broadly as their terms reasonably allow." Moreover, when interpreting a claim, words of the claim are generally given their ordinary and accustomed meaning, unless it appears from the specification or the file history that they were used differently by the inventor. *Carroll Touch, Inc. v. Electro Mechanical Sys., Inc.*, 15 F.3d 1573, 1577, 27 USPQ2d 1836, 1840 (Fed. Cir. 1993). Although an inventor is indeed free to define the specific terms used to describe his or her invention, this must be done with reasonable clarity,

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deliberateness, and precision. ***In re Paulson***, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994).

"[T]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." ***Texas Digital Sys., Inc. v. Telegenix, Inc.***, 308 F.3d 1193, 1201-02, 64 USPQ 1812, 1818 (Fed. Cir. 2002). "Moreover, the intrinsic record also must be examined in every case to determine whether the presumption of ordinary and customary meaning is rebutted." (citation omitted). "Indeed, the intrinsic record may show that the specification uses the words in a manner clearly inconsistent with the ordinary meaning reflected, for example, in a dictionary definition. In such a case, the inconsistent dictionary definition must be rejected." ***Texas Digital Sys., Inc.*** 308 F.3d at 1201-02, 64 USPQ at 1818.

Our decision hinges upon what is meant by a conductive hollow internally threaded female connector member integral with a conductive end terminal and housing the bullet-shaped wire splaying member. Appellant's specification states "[a]s shown in Figure 4, the female connector member 12' may be formed integrally with the conductive bullet-shaped member 11' and end terminal 10'."

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See page 3 of Appellant's specification. Upon our review of Figure 4, we see that the female connector member 12, the conductive bullet-shaped member 11 and the end terminal 10 are all one piece.

***The American Heritage Dictionary***, Second College Edition, defines integral as "a complete unit; whole."<sup>2</sup> Furthermore, we note that the Appellant has also argued that integral means that the hollow internal threaded member and the conductive end of the terminal post are one piece. Appellant points out that Lienard has a three-piece construction while the applicant only has a two-piece construction, the male conductor and the female conductor member. See pages 4 and 5 of the appeal brief. Therefore, we find that the term "integral" for the purposes of this application means that the female connector member, the conductive end terminal and the bullet-shaped wire splaying end are all made up of one piece.

Turning to Lienard, we find that Lienard fails to teach this structural limitation. Lienard teaches that the thread post 2 is totally separate and discrete from female member 1. See Figures

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<sup>2</sup> ***The American Heritage Dictionary***, Second College Edition, 1982, page 687. A copy of the pertinent portions have been provided.

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1 and 2 of Lienard. Therefore, we fail to find that Lienard teaches or suggests "a conductive hollow, internally threaded female connector member integral with said conductive end terminal and housing said bullet-shaped wire splaying end" as required by Appellant's claims 1 and 3. Therefore, we will not sustain the Examiner's rejection of claims 1 and 3 under 35 U.S.C. § 103.

**B. Rejection of Claim 4 under 35 U.S.C. § 103**

Upon our review of the scope of Appellant's claim 4, we fail to find that the language requires a one-piece construction for the first connector part as claimed. In particular, we note that Appellant's claim 4 recites

a first connector part comprising a conductive bullet-shaped wire-splaying member, a selected one of said end terminals, and a hollow internally threaded female connector member selected to said conductive end terminal and housing said bullet-shaped wire splaying end.

The term "selected" has a broader meaning than the term "integral" as recited in Appellant's claim 1. **The American Heritage Dictionary**, Second College Edition, defines "selected" as "singled out in preference; chosen." Thus, we find that the claim language does not require that the conductive bullet-shaped wire splaying member is an integrated single piece with the

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conductive end terminal and bullet-shaped wire splaying end. We find that the claim does allow for a reading in which the hollow internally threaded female conductor member is a separate piece from the conductive end terminal and the bullet-shaped wire splaying end.

Turning to Lienard, we find that Lienard does teach a bullet-shaped wire splaying end and conductive end terminal shown as elements 2 and 3 in Figures 1 and 2. Furthermore, we find that Lienard teaches a hollow internal threaded female conductor member shown as 1 in Figures 1 and 2 of Lienard. Furthermore, Lienard shows that the conductive bullet-shaped wiring splaying member 3, a selected one of said end terminals 2 and a hollow internal threaded female conductor member 1 selected to the conductive internal and housing said bullet-shaped wire splaying end in Figure 2 when these pieces are put together as a single conductor part. Therefore, we find that the Examiner did not err in finding that Appellant's claim 4 is broad enough in scope to read on Lienard. Therefore, we will sustain the Examiner's rejection of claim 4 under 35 U.S.C. § 103.

In view of the foregoing, we have not sustained the Examiner's rejection of claims 1 and 3 under 35 U.S.C. § 103.

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However, we have sustained the Examiner's rejection of claim 4 under 35 U.S.C. § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

***AFFIRMED-IN-PART***

KENNETH W. HAIRSTON	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
MICHAEL R. FLEMING	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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