

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte JIMMY CIESLA HENNINGSSEN

---

Appeal No. 2002-0903  
Application 09/359,916

---

ON BRIEF

---

Before HAIRSTON, JERRY SMITH, and LEVY, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 4-6, which constitute all the claims remaining in the application.

The disclosed invention pertains to a cable connector for terminating the end of a coaxial cable.

Representative claim 4 is reproduced as follows:

4. A cable connector for terminating the end of a coaxial cable, the coaxial cable including a center conductor, an outer conductor, and an outer jacket, said cable connector comprising:

- a. a main body having external threads;
- b. an outer bushing including internal threads that threadedly engage the external threads of said main body for securing said outer bushing to said main body;

c. a ferrule disposed within said outer bushing for axial displacement therein, said ferrule having a bore for receiving the end of the coaxial cable, said ferrule including at least one axial slot for allowing said ferrule to be radially compressed for making an electrical connection with the outer conductor of the coaxial cable, and for grasping the outer jacket of the coaxial cable;

d. an axially displaceable inner bushing disposed within said outer bushing, said inner bushing being axially displaced as the outer bushing threadedly engages said main body of the connector, and wherein said inner bushing, in turn, axially displaces and radially compresses said ferrule as the outer bushing threadedly engages said main body of the connector; and

e. the external threads of said main body and the internal threads of said outer bushing comprising multiple-start threads for allowing said outer bushing to be brought to a final mounting position upon said main body with only a relatively small degree of rotation of said outer bushing to reduce mounting time.

The examiner relies on the following references:

Klementich	5,360,239	Nov. 01, 1994
Locati et al. (Locati)	5,651,698	July 29, 1997
Elliman et al. (Elliman)	5,852,695	Dec. 22, 1998

Claims 4-6 stand rejected under 35 U.S.C. § 103(a). As evidence of obviousness the examiner offers Locati in view of Elliman or Klementich. The rejection of claim 4 based on the teachings of Jacobsen in view of Elliman or Klementich has been withdrawn by the examiner [answer, page 2].

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claim 4. We reach the opposite conclusion with respect to claims 5 and 6. Accordingly, we affirm-in-part.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in

Appeal No. 2002-0903  
Application 09/359,916

the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d

Appeal No. 2002-0903  
Application 09/359,916

1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this decision. Arguments which appellant could have made but chose not to make in the brief have not been considered and are deemed to be waived by appellant [see 37 CFR § 1.192(a)].

With respect to independent claim 4, the examiner finds that Locati teaches the claimed invention except for the external threads of the main body and the internal threads of the outer bushing comprising multi-start threads. The examiner cites Elliman and Klementich as teaching multi-start threads for tubular connections. The examiner finds that it would have been obvious to the artisan to provide the connector of Locati with the external threads of the main body and the internal threads of the outer bushing with multi-start threads as taught by Elliman or Klementich in order to reduce the mounting time [answer, pages 2-3].

With respect to the rejection based on Locati and Elliman, appellant argues that the multi-start thread of Elliman is not used to threadedly-engage two halves of a two-piece coaxial connector, nor do they directly lock two components together. Appellant argues that the examiner has failed to explain how the disclosure within Elliman can be applied to the coaxial connector

of Locati or how the references themselves suggest such a modification [brief, pages 7-8].

The examiner responds that Elliman teaches that threaded tubular connections using multi-start threads are frequently used as a well-known way to reduce mounting time. The examiner notes that Elliman's invention is related to electrical connectors and that it is not necessary for Locati and Elliman to have the same structural elements in order to provide Locati's bushing with multi-start threads as suggested by Elliman [answer, page 4].

Appellant responds that Elliman is not related to electrical connectors, but instead, is directed to connectors for use with optical fibers [reply brief, page 2].

We will sustain the examiner's rejection of claim 4 based on the teachings of Locati and Elliman. We agree with the examiner that the only difference between claim 4 and the disclosure of Locati is in the use of multi-start threads for the external threads of the main body and the internal threads of the outer bushing. Thus, the question before us is essentially the question of whether it would have been obvious to the artisan to use multi-start threads for the threads disclosed by Locati. We find that Elliman is analogous art because the problems relating to the connection of optical fibers are sufficiently related to

Appeal No. 2002-0903  
Application 09/359,916

the problems of connecting coaxial cables that the artisan would be expected to consider both arts in solving connector problems. Elliman specifically suggests the use of multi-start threads because full locking can be achieved in half a turn for convenience [column 4, lines 25-27]. We agree with the examiner that multi-start threads were known to the artisan, as taught by Elliman, to reduce the time needed to thread two components together. Therefore, the artisan would have found it obvious to broadly use multi-start threads in Locati for the sole purpose of simplifying the attachment of the main body to the outer bushing. The motivation provided by the examiner, to reduce the mounting time, is therefore, taken from the teachings of Elliman.

With respect to the rejection based on Locati and Klementich, appellant argues that the disclosure of Klementich has nothing to do with coaxial cable connectors or the transmission of electrical signals. Appellant argues that those skilled in the art of coaxial connector design would not look to designs for oil and gas pipe casings for guidance when designing coaxial connectors for conveying electrical signals [brief, page 9].

The examiner responds that Klementich teaches a threaded tubular connection. The examiner also notes that Klementich's

Appeal No. 2002-0903  
Application 09/359,916

threaded tubular connection, including the multi-start threads, can be used not just for connection of pipes [answer, page 4].

We will not sustain the examiner's rejection of claim 4 based on the teachings of Locati and Klementich. We agree with appellant that Klementich is essentially non-analogous art with respect to Locati. The claimed invention and Locati relate to the art of coaxial cable connectors. Klementich is directed to the art of "tapered threaded connections for large diameter pipe . . . such that it may function as casing for use in oil, gas, geothermal, disposal and other types of wells" [column 1, lines 9-14]. The artisan in the field of coaxial cable connectors would not look to the field of oil and gas pipes for solving connection problems in the field of coaxial cable connectors. The examiner's reliance on the general statement in Klementich that the invention is not limited by the disclosed embodiments is misplaced. That general statement provides no basis for applying the teachings of Klementich to the disparate field of coaxial cable connectors.

With respect to separately argued dependent claim 5, the examiner finds that the arrangement shown in Locati meets the limitations of claim 5 [answer, page 3]. Appellant argues that Locati fails to describe that the arrangement shown satisfies the

Appeal No. 2002-0903  
Application 09/359,916

limitations of claim 5 [brief, page 11]. The examiner responds that Locati meets the limitations of claim 5 because it uses the same frictional mechanism as appellant's own invention [answer, page 4]. Appellant responds that not only does Locati fail to disclose that ferrule 20 is locked against rotation relative to entry body 40, but instead, Locati discloses that ferrule 20 is allowed to freely rotate while under axial compression [reply brief, page 2].

We will not sustain either of the examiner's rejections of claim 5 or of claim 6 which depends from claim 5. We agree with appellant that the findings of the examiner with respect to claim 5 are unsupported by the teachings of Locati. The examiner's bald assertion that the arrangement of Locati meets the invention of claim 5 is at best an unsupported conclusion by the examiner and at worst contradicted by the disclosure of Locati.

In summary, we have sustained the examiner's rejection of claim 4 based on the teachings of Locati and Elliman. We have not sustained any of the other rejections. Therefore, the decision of the examiner rejecting claims 4-6 is affirmed-in-part.

Appeal No. 2002-0903  
Application 09/359,916

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	)	
	)	
	)	BOARD OF PATENT
	)	
	)	APPEALS AND
JERRY SMITH	)	
Administrative Patent Judge	)	INTERFERENCES
	)	
	)	
	)	
	)	
STUART S. LEVY	)	
Administrative Patent Judge	)	

JS/kis

Appeal No. 2002-0903  
Application 09/359,916

CAHILL, SUTTON & THOMAS, P.L.C.  
ATTN: MARVIN A. GLAZER  
155 PARK ONE  
2141 E. HIGHLAND AVENUE  
PHOENIX, AZ 85016