

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JOHN J. MOTTINE, JR.,  
KENNETH S. KOEHLER,  
SAYED J. MIRKAZEMI,  
RICHARD S. CUPRAK, JR.,  
GABRIEL P. PELLICCIOTTI,  
and  
TODD A. RHOADES

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Appeal No. 1999-2316  
Application No. 08/640,262

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ON BRIEF

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Before HAIRSTON, LALL, and GROSS, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 4, 6 through 10, 13, 14, 31, 39, 40, 45 and 47 through 50.

The disclosed invention relates to a communications cable that passes a standard plenum cable burn test, that meets

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Category 5 electrical requirements of TIA/EIA Standard 568A, and that passes the flame spread and smoke generation requirements of the UL-910 Steiner Tunnel Test.

Claim 39 is illustrative of the claimed invention, and it reads as follows:

39. A communications cable for use in building plenum applications, said cable comprising:

a core which comprises at least one transmission medium, each of said at least one transmission medium being enclosed by a primary insulation formed from substantially pure high density polyethylene;

an outer jacket surrounding said core and formed from a polyvinylidene fluoride (PVDF) composition; and

an intermediate material interposed between said core and said outer jacket, said intermediate material having high temperature stability and being configured to electrically separate said core from said outer jacket; wherein

said primary insulation, said outer jacket, and said intermediate material are formed and cooperatively configured such that said cable passes a standard plenum cable burn test and said cable meets the Category 5 electrical requirements of TIA/EIA Standard 568A.

The references relied on by the examiner are:

Gerland et al. (Gerland) 23, 1970	3,516,859	Jun.
Nye 1972	3,692,924	Sep. 19,
Arroyo et al. (Arroyo) 1986	4,605,818	Aug. 12,

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Arpin et al. (Arpin)	5,563,377	Oct. 8,
1996		
		(filed Jun. 16, 1994)
Bleich et al. (Bleich)	5,600,097	Feb. 4, 1997
		(filed Nov. 4, 1994)

TIA/EIA Standard: Commercial Building Telecommunications Cabling Standard, Telecommunications Industry Association, TIA/EIA-568-A, pp. 37, 39-45, 48-51, 2 unnumbered pages (Oct. 6, 1995) (hereinafter referred to as TIA/EIA Standard document).

Claims 45 and 47 through 50 stand rejected under 35 U.S.C.

§ 112, first paragraph, for lack of written description for the formulas set forth in claims 45 and 48.

Claims 4, 7, 9, 13, 39 and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Arroyo in view of Bleich.

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Arroyo in view of Bleich and Gerland.

Claims 8 and 31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Arroyo in view of Bleich and Arpin.

Claim 10 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Arroyo in view of Bleich and Nye.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Arroyo in view of Bleich, Nye and

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Arpin.

Claims 45, 47, 48 and 50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Arroyo in view of Bleich, Arpin and the TIA/EIA Standard document.

Claim 49 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Arroyo in view of Bleich, Arpin, the TIA/EIA Standard document and Gerland.

Reference is made to the brief (paper number 19) and the answer (paper number 20) for the respective positions of the appellants and the examiner.

#### OPINION

We have carefully considered the entire record before us, and we will reverse the rejection of claims 45 and 47 through 50 under the first paragraph of 35 U.S.C. § 112, and the rejection of claims 4, 6 through 10, 13, 14, 31, 39, 40, 45 and 47 through 50 under 35 U.S.C. § 103(a).

In response to the examiner's position that the formulas of claims 45 and 47 through 50 lack written description in the originally filed disclosure, appellants argue (brief, page 10) that "[t]he language related to the attenuation characteristics of the claimed twisted pair is expressly

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contained in the TIA/EIA Standard 568A, which is repeatedly referred to throughout Appellants' originally filed specification." Although "[a]ppellants acknowledge that the content of the TIA/EIA Standard 568A, which specifies the performance of Category 5 cable, was not expressly incorporated by reference in the original application," appellants are of the opinion (brief, page 11) that:

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Indeed, "Category 5" is a very well known term used in the relevant trade; those familiar with the term "Category 5" will recognize that it defines certain electrical performance criteria for cable. ([S]ee Declaration of John Mottine, at ¶ 4, filed concurrently with Appellants' Response dated June 2, 1998).

According to appellants (brief, pages 11 through 15), MPEP § 608.01(v) permits the use of trade names (e.g., Category 5) in patent applications. Appellants additionally argue (brief, page 15) that:

As set forth in the Declaration of John Mottine at, e.g., paragraphs 5 and 6, cables identified as "Category 5" cables were known to the inventors and to others in the art prior to April 30, 1996 (the filing date of the present application). In view of the general knowledge of Category 5 cable at the time of filing of the present application, Appellants submit that the originally filed application contained sufficient disclosure to permit those skilled in the art to fully practice Appellants' claimed invention.

In response to appellants' arguments, the examiner agrees with appellants' argument that the term "Category 5" may be used in the application, however, the examiner disagrees with appellants' arguments concerning the sufficiency of the disclosure because (answer, page 10):

[A]ccording to MPEP 608.01 (p), page 600-65, Rev. 3, July 1997, it states that "Mere reference to another application, patent or publication is not an

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incorporation of anything therein into the  
application

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containing such reference for the purpose of the disclosure required by 35 USC [§] 112, first paragraph. In re de Seversky, 474 F.2d 671, 177 USPQ 144, (CCPA 1973)".

Ordinarily, any "essential material" that is necessary to describe the claimed invention may not be incorporated by reference to "non-patent publications." See MPEP § 608.01(p). In the present case, however, the disclosure is very clear that the disclosed and claimed cable must meet Category 5 electrical requirements such as provided in Electronic Industries Association specification TIA-568A (specification, pages 4 through 6 and 10). We agree with the declarant, John Mottine, that the claimed formulas are used in the TIA-568A Standard in connection with Category 5 cable requirements (declaration, paragraphs 11 and 12). Thus, the rejection of claims 45 and 47 through 50 under the first paragraph of 35 U.S.C. § 112 is reversed because the originally filed disclosure did contain sufficient disclosure for the specifically claimed formulas "to permit those skilled in the art to fully practice Appellants' claimed invention" (brief, page 15).

Turning to the obviousness rejection of claim 39,

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appellants and the examiner both agree (brief, page 19; answer, page 5) that Arroyo discloses a cable core 21 enclosed by a primary insulation of polyvinyl chloride (PVC), as opposed to high density polyethylene (HDPE), an intermediate material layer 31 of polytetrafluoroethylene (PTFE) resin, and an outer jacket 40 of polyvinylidene fluoride (PVDF). Since Bleich discloses "a cable comprising a conductor (24) insulated with HDPE," the examiner concludes (answer, page 5) that "[i]t would have been obvious to one skilled in the art to use HDPE for the insulation of the Arroyo et al. conductor since HDPE is a relative[ly] tough dielectric material which can be uniformly extruded with a smooth outer surface as taught by Bleich et al. (col. 4, lines 31-33)." In response, appellants argue (brief, pages 20 through 22) that the examiner has not explained why the skilled artisan would replace a material in Arroyo with another material that would cause it to cease operating for its intended purpose. Stated differently, appellants are of the opinion (brief, page 22) that [i]t is simply ridiculous to suggest that one skilled in the art would be motivated to remove a flame resistant material from the Arroyo et al. cable and replace it with a

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flammable material in a flammable environment." Appellants conclude, therefore, that the examiner "has engaged in an improper hindsight reconstruction of the claimed invention" (brief, page 24). Inasmuch as Bleich is completely silent as to the use of HDPE in lieu of PVC in a cable such as the one disclosed by Arroyo, and the examiner has failed to present a convincing line of reasoning as to why the skilled artisan would have made such a modification to the teachings of Arroyo, we agree with the appellants' argument (brief, page 20) that the examiner has failed to present a prima facie case of obviousness. Thus, the 35 U.S.C. § 103(a) rejection of claim 39 is reversed. The 35 U.S.C. § 103(a) rejection of claims 4, 6 through 10, 13, 14, 31, 40, 45 and 47 through 50 is likewise reversed because the teachings of Gerland, Arpin, Nye and the TIA/EIA Standard document do not cure the noted shortcomings in the teachings and suggestions of Arroyo and Bleich.

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DECISION

The decision of the examiner rejecting claims 45 and 47 through 50 under the first paragraph of 35 U.S.C. § 112 is reversed, and the decision of the examiner rejecting claims 4, 6 through 10, 13, 14, 31, 39, 40, 45 and 47 through 50 under 35 U.S.C. § 103(a) is reversed.

REVERSED

KENNETH W. HAIRSTON	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
PARSHOTAM S. LALL	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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ANITA PELLMAN GROSS	)	
Administrative Patent Judge	)	

KWH:hh

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SNELL & WILMER  
ONE ARIZONA CENTER  
400 EAST VAN BUREN  
PHOENIX, AZ 85004-0001