

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reexamination of:

William T. Clark et al.

Examiner: Minh T. Nguyen

Control No.: 95/000,474

Art Unit: 3992

Patent No.: 6,570,095

Confirmation No.: 5251

Issue Date: May 27, 2003

For: MULTI-PAIR DATA CABLE WITH
CONFIGURABLE CORE FILLING AND PAIR
SEPARATION

**THIRD PARTY REQUESTER'S COMMENTS TO
PATENT OWNER'S RESPONSE UNDER 37 C.F.R. § 1.947**

Mail Stop *Inter Partes* Reexam
ATTN: Central Reexamination Unit
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Third Party Requester respectfully provides these Comments to the Patent Owner's Amendment and Response to Office Action in *Inter Partes* Reexamination, served on December 10, 2009, in connection with the above-identified *inter partes* reexamination proceeding. The Patent Owner's Amendment and Response to Office Action was accompanied by a Petition to suspend rule 37 C.F.R. § 1.943(b), which has yet to be acted on. As such, the 30-day time period for Comments has not been triggered.

The Third Party Requester requests that the Examiner maintain the rejection of and issue an action closing prosecution of original claims 1-33, deem the arguments advanced by the Patent Owner in the Patent Owner's Response to be erroneous, improper and/or unpersuasive, and issue a rejection of each of the added claims 34-40, for the reasons discussed below.

I hereby certify that this petition is being transmitted by EFS-Web addressed to: Mail Stop *Inter Partes* Reexam, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 11, 2010.

/W. Scott Petty/

W. Scott Petty – Reg. No. 35,645

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REMARKS

On September 10, 2009 the Patent Office transmitted an Office Action rejecting all 33 claims of U.S. Patent No. 6,570,095 (hereinafter, “the ‘095 patent”) as unpatentable on multiple grounds. The Patent Owner responded on December 10, 2009. The response added seven claims, including independent claim 34. The following Comments address issues presented in the Office Action and the Patent Owner’s Amendment and Response to Office Action in *Inter Partes* Reexamination, served on December 10, 2009 (hereinafter, the “Patent Owner’s Response”) to that Office Action.

The Patent Owner’s Response is addressed as indicated in the table below:

Issue Challenged in Patent Owner’s Response and Page Numbers in Response¹	Applicable Claims	Page Numbers in These Comments Where Issue is Addressed
The separator disclosed in the ‘866 patent is “substantially flat.”	27-29	6-10
The ‘866 patent discloses “wherein the configurable dielectric pair separator, the first twisted pair of insulated conductors and the second twisted pair of insulated conductors are twisted about a common central axis to form a twisted pair cable.”	27-29	10-11
The teachings of the ‘866 patent and the ‘683 patent render obvious the claim limitation of a dielectric pair separator consisting of a dielectric layer	1, 9-13, 20, and 21	12-14
The ‘866 patent discloses that “the plurality of twisted pairs of insulated conductors and the dielectric pair separator are twisted together in a helical manner along the longitudinal length of the data communications cable” as recited in dependent claim 21	21	14
U.S. Patent 5,670,748 teaches materials that would be used for a separator	2, 4, 5, 14, and 16	14-16
European Patent 0 569 217 teaches woven fiberglass materials that would be used for a separator	3 and 15	17

¹ For the purposes of this roadmap, shorthand notation for the references and the issues has been used. These Comments fully describe the issue and clearly identify the relevant prior art in the remarks below.

Issue Challenged in Patent Owner's Response and Page Numbers in Response¹	Applicable Claims	Page Numbers in These Comments Where Issue is Addressed
Claims 6, 7, 17, and 18 are not patentable over the combination of the '866 patent, '683 patent, and '711 patent	6, 7, 17, and 18	17
Claims 6 and 17 are not patentable over the combination of the '866 patent, '683 patent, and '710 patent	6 and 17	18
The '099 patent is properly combined with the '866 patent and the '683 patent	8 and 19	18-19
Claim 21 is not patentable over the combination of the '866 patent, '683 patent, and the Admitted Prior Art	21	19
Claim 21 is not patentable over the combination of the '866 patent, '683 patent, and the '711 patent	21	19-20
Claim 22 is not patentable over the combination of the '866 patent, '683 patent, and '629 patent	22	20
Claim 23 is not patentable over the combination of the '866 patent, '683 patent, and '250 patent or '485 patent	23	20
The '346 patent in combination with the '866 patent renders claims 24-26 unpatentable	24-16	22-23
Claims 27-29 are not patentable over the combination of the '866 patent and the Admitted Prior Art	27-29	22-23
Claim 27-29 is not patentable over the combination of the '866 patent and the '711 patent	27-29	23
Claim 30 is not patentable over the combination of the '866 patent, the '748 patent, and either the '711 patent or the Admitted Prior Art	30	23-24
Claim 31 is not patentable over the combination of the '866 patent and the '748 patent, as the '866 patent discloses a flat separator	31	24-25
Claim 31 is not patentable over the combination of the '866 patent and the '748 patent, as the '748 patent discloses a foamed polymer material used for data communications cables	31	25-26
The Patent Owner failed to rebut the rejection of claims 32 and 33	32-33	26
Claims 1, 9-13, 20, and 21 are anticipated by the Japanese '645 patent	1, 9-13, 20, and 21	26-27
The separator disclosed in the '645 patent is flat	27-29	27

Issue Challenged in Patent Owner's Response and Page Numbers in Response¹	Applicable Claims	Page Numbers in These Comments Where Issue is Addressed
The '645 patent discloses the configurable dielectric pair separator, the first twisted pair of insulated conductors and the second twisted pair of insulated conductors twisted about a common central axis to form a twisted pair cable	27-29	28
The '645 patent discloses multiple grooves	27-29	28-29
The '748 patent discloses materials that can be used for the separator of the '645 patent	2, 4, 5, 14, 16 and 30-33	29
European Patent 0 569 217 teaches woven fiberglass materials that would be used for a separator	3 and 15	30
The '099 patent is properly combined with the '645 patent	8 and 19	31
Claim 22 is not patentable over the combination of the '645 patent and '629 patent	22	31-32
Claim 23 is not patentable over the combination of the '645 patent and '250 patent or '485 patent	23	32
The '346 patent in combination with the '645 patent renders claims 24-26 unpatentable	24-26	32-33
Patent Owner has admitted that a cross-web separator satisfies the claim elements of independent claims 1 and 10 and dependent claims 6, 9, 11, 13, 17, and 20-22	6, 9, 11, 13, 17, and 20-22	33-34
The '748 patent discloses materials that can be used for the separator of the '711 patent	2, 5, and 16	34
Claim 23 is not patentable over the combination of the '645 patent and '250 patent or '485 patent	23	34
The Patent Owner's "Secondary Considerations" Should Be Given Little Or No Weight	all	34-39
Patent Owner's Support For New Claims Is Deficient	34-40	39-41
New Claims Are Not Patentable Over Prior Art Printed Publications	34-40	41-51

The Third Party Requester respectfully asserts that these Comments are within the 50-page limit, as the Specific Comments are no more than 47 pages (pages 5-51) and the substantive part of Mr. Baxter's Declaration (paragraphs 8-22) is no more than 2 pages for a total of 49 pages.

Specific Comments

Overview

The Third Party Requester respectfully submits that the Patent Owner's Response is erroneous, improper and/or unpersuasive and should be disregarded by the Examiner. For example, the Declarations from Mr. Niemiera and Mr. Gareis, both employees of the Patent Owner, are not credible and do not adequately support the Patent Owner's positions. Mr. Niemiera's Declaration alleges certain facts used to support secondary considerations for the '095 patent claims. However, neither Mr. Niemiera nor the Patent Owner provide any nexus between these facts and the patented invention. *See, e.g., In re DBC*, 545 F.3d 1373, 1384 (Fed. Cir. 2008) (requiring such a nexus).

Similarly, Mr. Gareis's Declaration attempts to support the position that shielded and unshielded cables represent unconnected art. However, this position is contrary to the specification of the '095 patent and other cable industry patents, including a patent for which Mr. Gareis is an inventor. These patents treat shielded and unshielded cables comparably and fail to disclose any unpredictability moving from shielded to unshielded cables.

Also, in its Response, the Patent Owner improperly attempts to construe the terms of the pending claims narrowly in view of the Examiner's rejection of the claims. While this approach is not surprising given the compelling nature of the prior art references, it is improper. In a reexamination proceeding, claims are to be given their broadest construction consistent with the specification. *See In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) ("During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification."). The Patent Owner could have narrowed the scope of the claims by amending them, but chose not to. Instead, the Patent Owner is attempting to narrow the claim scope by narrowly construing the claim terms in a manner improper for this reexamination proceeding.

Further, the Patent Owner attempts to narrowly apply the prior art teachings, for example, by focusing on the problems and solutions addressed in the prior art reference rather than the teaching of that reference as a whole. Again, this approach is improper. *See In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983) ("The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned.

They are part of the literature of the art, relevant for all they contain.”); *see also* MANUAL OF PATENT EXAMINING PRACTICE § 2123 (Rev. 7, Jul. 2008) (citing *In re Heck*).

The original claims remain unpatentable over the prior art printed publications of record. Also, the newly-added claims are unpatentable, either under 35 U.S.C. § 102(b) or 35 U.S.C. § 103(a) over prior art printed publications of record. The Third Party Requester’s Comments below more completely address these and other deficiencies with the Patent Owner’s Response.

Claims 1-33 Should Stand Rejected Over The Prior Art Publications

Issue: The separator disclosed in the ‘866 patent is “substantially flat.”

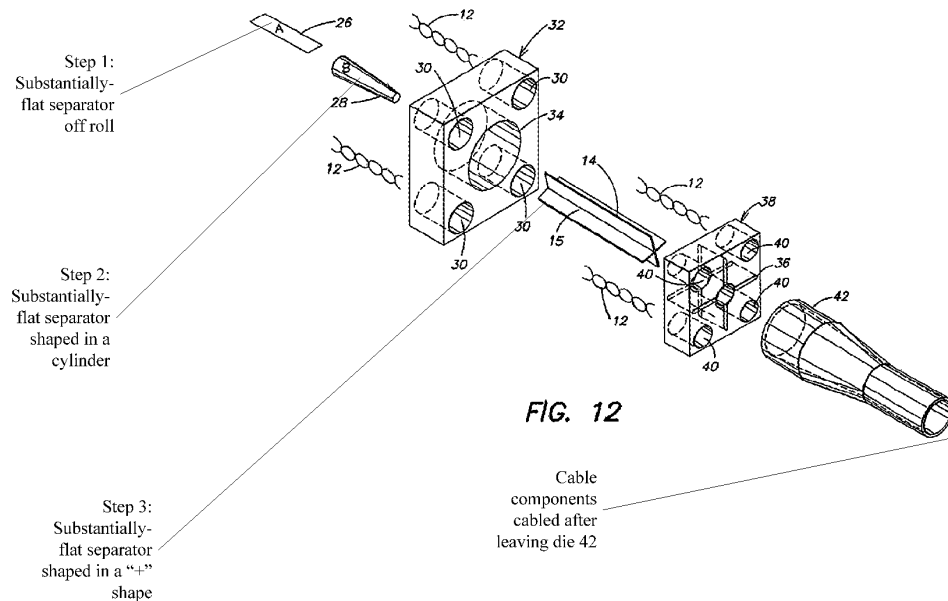
The separator disclosed in the ‘866 patent is a “substantially flat” separator as required in pending claims 27-29 of the ‘095 patent. The Patent Owner attempts to avoid this fact by improperly construing the word “flat.” *See* Patent Owner Response at 16-17.

As an initial point, the Third Party Requester notes that the Patent Owner agrees that the separator disclosed in the ‘866 patent is a substantially flat separator that is shaped to separate one twisted pair from another twisted pair in the cable. *See* Patent Owner Response at 16 (“The fact that the shielding foils can be bent, *or can be made of a flat sheet of materials*”) (emphasis added).

To get around this prior art disclosure, the Patent Owner now wants the Examiner to construe the phrase “separator being substantially flat” to mean “flat when the separator is in the finished cable.” This narrow construction is improper for a reexamination and against the plain meaning of the claim term. The law requires the Examiner to give a claim term its **broadest** reasonable construction, consistent with the specification. *See In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (“During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.”); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005); MANUAL OF PATENT EXAMINING PRACTICE § 2111 (Rev. 7, Jul. 2008). The specification of the ‘095 patent consistently refers to a configurable separator as “flat,” even when that separator has been shaped. *See, e.g.*, ‘095 patent, col. 6, ll. 12-17 (“In the embodiment of the cable of FIG. 6, the pair separator 14 is a flat configurable tape used as a core filler, that is shaped to have the illustrated profile and that is provided in the cable between the four twisted pairs 12. In particular, in this embodiment, the configured pair separator has a shape somewhat like a “+”

....”); ‘095 patent, col. 6, ll. 24-25 (“[I]t is preferred that the pair separator is supplied as a flat extruded tape”).

As illustrated in the ‘095 patent’s description of the manufacturing process, the separator is substantially flat, then configured during manufacturing. That description is illustrated below:



At “Step 1,” which is “prior to cabling,” the pair separator is substantially flat. At “Step 2,” the separator is still flat, just shaped in a cylinder. At “Step 3,” the separator is still flat, just shaped in a “+”-shape (the 1:30, 4:30, 7:30, and 10:30 positions of the cylinder have been collapsed towards the middle of the cylindrical shape). At a step after the cable components leave the die 42, the “cabling” takes place. At three points before that, the pair separator is “substantially flat.”²

The Patent Owner wants to re-write claims 27-29 of the ‘095 patent to narrow their scope without actually amending the claims. The Patent Owner wants the claim element of claim 27 to be interpreted to recite: “the configurable pair separator having a substantially flat separator in the finished cable” U.S. Patent 6,998,537 (hereinafter, “the ‘537 patent”), which issued from

² Even if you require the separator to be flat and unshaped prior to cabling, that is still disclosed in the ‘866 patent because, like the separator at Step 1, prior to shaping the separator is flat. The time “prior to shaping” must occur “prior to cabling,” as recited in claims 3 and 14.

a continuation application to the application that matured into the '095 patent, recites such a claim. *See* '537 patent, col. 9, ll. 15-20 (reciting a “finished communications cable comprising: ... a substantially flat configurable dielectric separator” in claim 1). Claims 27-29 of the '095 patent do not have such a limitation and it would be improper to interpret these claims that narrowly in this reexamination. Indeed, during the prosecution of the application that matured into the '537 patent, the Patent Owner amended claim 1 of the '537 patent to recite “a substantially flat configurable dielectric separator ... in the finished communications cable,” to overcome a prior art reference disclosing a flat separator. *See* Prosecution History of Application 10/336,535, Amendment at 2, 6-8 (Sep. 17, 2004) (attached herein as Exhibit 2).

The Patent Owner attempts to use the prosecution of the '537 patent to support its narrow construction. *See* Patent Owner Response at 16-17. Of course, this argument must fail for at least 2 reasons. First, as stated above, the Patent Owner amended claim 1 of the '537 patent to require the configuration in a finished cable. No such recitation exists in claim 27 of the '095 patent.

Second, the Notice of Allowability cited by the Patent Owner in support of its position was **NOT** the final Notice of Allowability for the claims of the '537 patent. Indeed, the Patent Office rejected the claims identified in the Notice of Allowability attached as Appendix E to the Patent Owner's Response and the Patent Owner further amended independent claim 1 to recite “so as to be substantially flat in a radial cross-section taken through the finished communications cable.” *See* Prosecution History of Application 10/336,535, Amendment at 2 (Sep. 7, 2005) and **subsequent** Notice of Allowability (Sep. 30, 2005) (attached herein as Exhibit 3).

Even if you apply the narrow construction proffered by the Patent Owner and the implied timing (that is, substantially flat after the cable is made), the '866 patent discloses that flat separator. The '095 patent discloses only one embodiment that could conceivably satisfy the narrow construction of the Patent Owner. That embodiment is pictured in Figures 4 and 5 of the '095 patent, with Figure 5 depicting the cross-sectional view of the cable. *See* '095 patent, col. 4, l. 59 - col. 5, l. 5 (“FIG. 4 depicts an embodiment of a data communications cable 10 according to the present invention. ... FIG. 5 depicts a cross-sectional view of an embodiment of the cable of FIG. 4. The configurable pair separator 14 runs along a longitudinal length of the cable, and is configured such that the twisted pairs are disposed within channels or grooves 15 of the pair separator along the length of the cable.”). Figure 5 is reproduced below:

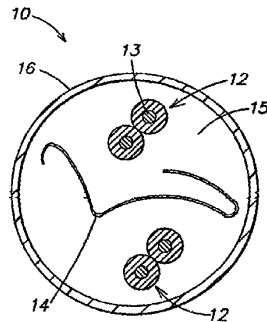


FIG. 5

Embodiment of the '095 patent.

As can be seen from Figure 5 of the '095 patent, the "flat" separator 14 has grooves. "The configurable pair separator 14 runs along a longitudinal length of the cable, and is configured such that the twisted pairs are disposed within channels or grooves 15 of the pair separator along the length of the cable." '095 patent, col. 4, ll. 44-47. Compare the separator 14 of Figure 5 of the '095 patent with a separator 5 disclosed in the '866 patent, as reproduced below.

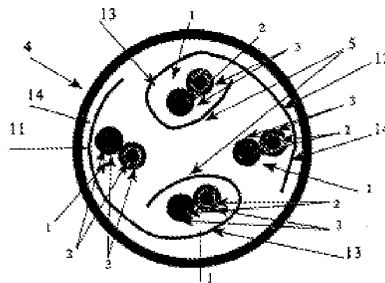


Figure 1

Embodiment of the '866 patent.

As can be seen, the separators have a comparable shape. The '866 pair separator satisfies even the restrictive construction applied by the Patent Owner for claims 27-29. The two separators are compared below (the separator from the '866 patent is the lower separator from Figure 1 of the '866 patent, rotated approximately 30 degrees to the left):



Substantially flat separator of the '866 Patent (on left) and '095 Patent

The Third Party Requestor respectfully requests that the Examiner maintain rejections of the claims 27-29 based on the '866 patent disclosing a substantially flat separator. The Examiner should reject the Patent Owner's attempt to improperly narrow the construction of the term "substantially flat" in the absence of expressly amending claims 27-29 to conform to the Patent Owner's position.

Issue: The '866 patent discloses "wherein the configurable dielectric pair separator, the first twisted pair of insulated conductors and the second twisted pair of insulated conductors are twisted about a common central axis to form a twisted pair cable."

Contrary to the Patent Owner's assertion at page 17 of the Patent Owner's Response, the '866 patent discloses the claim limitation "wherein the configurable dielectric pair separator, the first twisted pair of insulated conductors and the second twisted pair of insulated conductors are twisted about a common central axis to form a twisted pair cable." The '866 patent discloses that "[t]he invention-specific arrangement of the shielding further makes it possible to use stranding and/or longitudinal reshaping of the conductor pair to apply onto or insert the shielding into the cable. By this means, cost-effective manufacture is made possible in a continuous manufacturing process." '866 Pat., Eng. transl. at 2. This "longitudinal reshaping" is the twisting about a common axis. *See* Declaration of Baxter at para. 11 (Attached as Exhibit 1). One of ordinary skill in the art would understand this quoted language to mean that the cable is finished by twisting the cable components about a common axis. *See* Declaration of Baxter at para. 11. The Third Party Requester respectfully submits that the Patent Owner fails to consider the relevant disclosure in the '866 patent in support of its contention.

The Patent Owner attempts to further support its position by stating that "[c]abling of the cable including the shielding foils disclosed in the '866 patent would be complex, would likely result in inoperable cables, and so should be avoided." Patent Owner's Response at 17. The

Patent Owner cites to the Declaration by Mr. Gareis. The Third Party Requester notes that Mr. Gareis, an employee of the Patent Owner, offers no objective evidence to support his statements, such as testing results, that a cable with shielding foils could not be twisted.

The Third Party Requester respectfully submits that Mr. Gareis's conclusions are unpersuasive, at least as to the complexity of the process and the inoperability of the cable. The '095 patent disclosure itself envisions this very situation - a foil/plastic pair separator in a cable finished by helical or S-Z twisting. The embodiment of Figure 6 of the '095 patent includes a pair separator with a foil layer and a plastic laminate layer. See '095 patent, col. 6, ll. 33-37 ("For this embodiment, it is preferable that the configurable core pair separator be an aluminum/mylar tape, with an aluminum layer on a side of the tape facing the plurality of twisted pairs."). The '095 patent goes on to teach that "[i]t is to be appreciated that the cable can be twisted with any known twisting arrangement such as a helix, or an S-Z configuration. It is also to be appreciated that this method can be varied to include any of the components illustrated and discussed above, such as, for example, to include a drain wire, a binder, a shield, or central core filler." '095 patent, col. 9, ll. 10-12. Nowhere does the specification of the '095 patent teach that this process would be complicated with a foil/plastic pair separator or how one would make the invention given any complexity. Further, nothing in the '095 patent suggests that the separator would wrinkle or tear, as opined by Mr. Gareis. Indeed, Mr. Gareis seems to direct his opinion to a separator made of foil only. See Gareis Declaration at para. 17. This paragraph in the Gareis Declaration discusses a "foil shield" and "stretching the foil." His discussion appears to ignore a structure that includes a foil shield and plastic laminate, as disclosed in the '866 patent.

The Third Party Requestor respectfully requests that the Examiner maintain rejections of the claims 27-29 based on the '866 patent disclosing cabling the cable components about a common axis. The Examiner should reject the Patent Owner's unsupported assertions regarding the disclosure of the '866 patent and the ability to twist the disclosed cable components about a common axis.

Issue: The teachings of the '866 patent and the '683 patent render obvious the claim limitation of a dielectric pair separator consisting of a dielectric layer.

Contrary to the Patent Owner's assertions at pages 17-20, the teachings of the '866 patent in combination with the teachings of the '683 patent (U.S. Patent No. 3,622,683) renders obvious

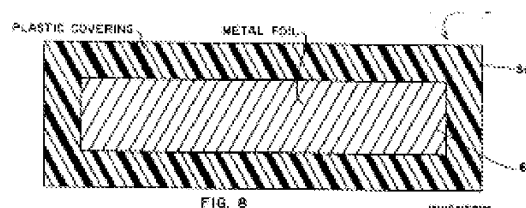
claims 1, 9-13, 20, and 21. Specifically, the disclosure of the '866 patent in combination with the disclosure of the '683 patent teaches one of ordinary skill in the art the claim limitation "dielectric pair separator consisting of a dielectric layer." As the Examiner has asserted, based on this combination, it would have been obvious to one of ordinary skill in the art to remove the foil from the foil/plastic laminate separator to arrive at the recited separator.

The Third Party Requester respectfully submits that the Patent Owner's assertion that it would not have been obvious to simply remove the additional material of the metal foil from the foil/plastic laminate separator disclosed in the '866 patent is unsupportable. First, the Patent Owner argues that a combination of the '866 patent separator and the '683 patent separator would still have a foil component. *See* Patent Owner's Response at 18. The Patent Owner's contention ignores what is **taught** in this combination, but instead wants to mechanically combine the literal embodiments. As the Examiner asserted, one **teaching** of the combination is that there is a finite possible number of configurations for the separator. Given that the foil element adds cost to the cable, one skilled in the art would be motivated to **try** a cable with no foil component - one of the finite number of arrangements for the separator. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) ("When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp."). Also, in the U.S. market, one of ordinary skill in the art would be motivated to try a configuration without the foil, as in the U.S., cable manufacturers had a preference for unshielded cables. *See* Declaration of Baxter at para. 12-13. The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 1, 9-13, 20, and 21 as unpatentable under 35 U.S.C. § 103(a) as obvious over the '866 patent in view of the '683 patent.

The Patent Owner further contends that the proposed modification would render the prior art reference unsatisfactory for its intended purpose. *See* Patent Owner Response at 18-19. The Patent Owner is improperly restricting the teachings of the prior art reference. The Patent Owner improperly focuses on the purpose of the foil and then concludes that, without the foil the purpose is not satisfied. This micro-level approach is not correct. The proper focus is on the purpose of the disclose device - a telecommunications cable. As the '866 patent states, "[t]he problem that is the basis for the present invention, proceeding from the data transmission cable

described initially, is to configure it so that the manufacturing costs can be lowered, without the transmission properties, especially in a transmission range from 1 to 100 MHz or 1 to 600 MHz, being impaired as compared to those cables with individually shielded conductor pairs. '866 patent, Eng. transl. at 1. In other words, the objective of the '866 patent is to have a cable that will operate in the frequency range of 1 to 100 MHz in a way comparable to a cable with individually-shielded conductors. The test data quoted by Mr. Niemiera demonstrates that a pair separator that is made of only plastic material performs adequately for the disclosed purpose of the '866 patent, a telecommunications cable. *See* Declaration of Mr. Niemiera at para. 7 and accompanying appendix. The Third Party Requester respectfully submits that modifying the tape separator of the '866 patent by removing the metal foil and leaving only a plastic separator would result in a cable that operates as intended in the telecommunications field.

Also, the Patent Owner argues that the separator configuration disclosed in the '683 patent showing a metal foil encapsulated in plastic fails to satisfy the claim limitation “dielectric pair separator consisting of a dielectric layer.” Once again, the Patent Owner attempts to narrowly construe the terms of the claims contrary to the proper approach during reexamination. *See* Patent Owner Response at 19. Specifically, as the Examiner correctly determined, the embodiment of Figure 8 of the '683 patent, depicted below, satisfies the recited claim limitation. This configuration, by means of its total encapsulation of the metal foil, forms a single layer that acts as a dielectric material. As such, the disclosed separator is a “dielectric pair separator **consisting of** a dielectric layer.” The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 1, 9-13, 20, and 21 based on the alternative ground that the '683 patent expressly discloses a separator configuration satisfying the claim limitation of a “dielectric pair separator consisting of a dielectric layer” and find the Patent Owner’s attempt to construe the claim terms narrowly improper.



Finally, Mr. Gareis declares that “shielded and unshielded cables have a different status in the art,” to suggest that one of ordinary skill in the art would not look to the '866 patent

teachings because of the difficulty in adjusting cable parameters when going from a shielded to unshielded cable. *See* Declaration of Galen Gareis Under 36 C.F.R. § 1.132 at para. 11 (attached to the Patent Owner's Response). Of course, this statement is not correct. *See* Declaration of Baxter at para. 10. Indeed, the '095 patent specification itself discloses that the cable could be shielded or unshielded and makes **NO** reference to any difficulties in going from an unshielded to shielded cable. This lack of teaching indicates that the inventors did not see any difficulty or any "different status in the art" between shielded and unshielded cables. *See* '095 patent, col. 6, ll. 12-66 (disclosing a shielded embodiment).

Issue: The '866 patent discloses that "the plurality of twisted pairs of insulated conductors and the dielectric pair separator are twisted together in a helical manner along the longitudinal length of the data communications cable" as recited in dependent claim 21.

The Patent Owner attempts to further distinguish dependent claim 21 by arguing that the '866 patent fails to disclose the claim limitation "the plurality of twisted pairs of insulated conductors and the dielectric pair separator are twisted together in a helical manner along the longitudinal length of the data communications cable." As discussed above, the '866 patent does disclose this cabling limitation. For the reasons discussed above, the Third Party Requester respectfully requests that the Examiner maintain the rejection of dependent claim 21.

Issue: U.S. Patent 5,670,748 teaches materials that would be used for a separator.

The Examiner rejected claims 2, 4, 5, 14, and 16 under 35 U.S.C. § 103(a) as obvious over the '866 patent in view of U.S. Patent 5,670,748 (the "'748 patent"). The Patent Owner improperly attempts to limit the teaching of the '748 patent in an attempt to avoid this reference. The Third Party Requester respectfully requests that the Examiner ignore the improper argument and maintain the rejection of claims 2, 4, 5, 14, and 16.

The Patent Owner's Response ignores the overall teaching of the '748 patent and attempts to focus the Examiner on the claimed invention of the '748 patent, which relates to an invention for insulating conductors. *See* Patent Owner's Response at 20-21. This approach is improper. "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983). The

Third Party Requester respectfully contends that the ‘748 patent’s teaching is broader than the invention it claims.

The background of the ‘748 patent teaches:

In plenum applications for voice and data transmission, electrical conductors and cables should exhibit low smoke evolution, low flame spread, and favorable electrical properties. Materials are generally selected for plenum applications such that they exhibit a balance of favorable and unfavorable properties. In this regard, each commonly employed material has a unique combination of desirable characteristics and practical limitations. Without regard to flame retardancy and smoke suppressant characteristics, olefin polymers, such as polyethylene and polypropylene, are melt extrudable thermoplastic materials having favorable electrical properties as manifested by their very low dielectric constant and low dissipation factor.

‘748 patent, col. 2, ll. 1-13.

As seen from this disclosure, the background section discusses **materials** used for plenum cable applications. The background of the ‘748 patent continues by stating that:

Table 1 below summarizes the electrical performance and flame retardancy characteristics of several polymeric materials. Besides fluorinated ethylene/propylene, other melt extrudable thermoplastic generally do not provide a favorable balance of properties (i.e., high LOI, low dielectric constant, and low dissipation factor). Moreover, when flame retardant and smoke suppressant additives are included within thermoplastic materials, the overall electrical properties generally deteriorate.

‘748 patent, col. 2, ll. 50-60.

Table 1 of the ‘748 patent discloses **material** properties, independent of whether the material is being used to insulate a conductor. These properties include dielectric constant, dissipation factor, Limiting Oxygen Index (LOI), and smoke generation. All of these properties would be considered by one of ordinary skill in the art in choosing materials for a cable. *See* Baxter Declaration at para. 14-15, 20. Additionally, the ‘748 patent expressly states:

In general, the electrical performance of an insulating material is enhanced by foaming or expanding the corresponding solid material. Foaming also decreases the amount of flammable material employed for a given volume of material. Accordingly, a foamed material is preferably employed to achieve a favorable balance of electrical properties and flame retardancy.

‘748 patent, col. 3, ll. 20-26.

Although this disclosure is in the context of insulation for conductors, this teaching would be considered by one of skill in the art even when choosing materials for a separator, if not just for

the reduced amount of material that occurs due to foaming. *See* Baxter Declaration at para. 15. The ‘748 patent makes clear that electrical performance considerations are not limited to conductor insulation. *See* ‘748 patent, col. 3, ll. 58-60 (“The principal electrical criteria can be satisfied based upon the dielectric constant and dissipation factor of an insulation *or jacketing material*.”) (emphasis added).³ Indeed, this statement alone counters the Patent Owner’s position, which tries to limit the teaching of the ‘748 patent to materials that come into contact with bare metal. *See* Patent Owner’s Response at 21. A cable jacket does not come into contact with the bare metal of a conductor in a cable with insulated conductors.

The Third Party Requester respectfully submits that the Patent Owner’s unsupported assertion that a “disclosure of a particular material used for an insulation layer does not provide any teaching or suggestion to use that material to form a pair separator” is not correct and the Examiner should disregard this improper attorney argument.

Issue: European Patent 0 569 217 teaches woven fiberglass materials that would be used for a separator.

Similar to the issue above, the Patent Owner narrowly applies the teaching of European Patent Application No. 0 569 217 (hereinafter, “the 217 patent”) in an attempt to get around the true teachings of this prior art reference. *See* Patent Owner’s Response at 21-22. Again, the Patent Owner argues that a material that can be used to insulate an electrical conductor would not be considered for a pair separator. The Third Party Requester respectfully submits that this argument is not technically correct. *See* Baxter Declaration at para. 16.

The Patent Owner attempts to distance the teaching of the ‘217 patent by stating that the reference discloses using the woven fiberglass on “magnetic wire, low-voltage wiring, high-

³ As an indication of the state-of-the-art in the cable industry before the filing of the application that serves as the priority document for the ‘095 patent (priority date asserted by the Patent Owner of Feb. 25, 1999), U.S. 6,211,467 (hereinafter, “the ‘467 patent,” which has a priority date before that of the ‘095 patent) discloses a central filler that separates the twisted pairs of the cable. The preferred materials for that pair separator are the same as those identified for the conductor insulation disclosed in the ‘467 patent and the same as the materials identified in the ‘748 patent. *See* ‘467 patent, col. 6, l. 62 - col. 7, l. 45. This section also discloses foaming the pair separator. The disclosure in the ‘467 patent is consistent with Mr. Baxter’s opinion on the knowledge of one of ordinary skill in the art. *See* Baxter Declaration at para 20. *See also* WO 9320563 publication (hereinafter, the ‘563 reference) at 4-7 (published October 14, 1993) (cited as providing a further indication of the knowledge of one of ordinary skill in the art and disclosing these same materials for use as insulation for a conductor and for a tape separator).

voltage cables and devices such as motors and generators.” *See* Patent Owner’s Response at 22. As explained by Mr. Baxter, this assertion is not correct. The teaching of the ‘217 patent extends to communications cable applications. *See* Baxter Declaration at para. 16. Indeed, the ‘217 patent teaches that the disclosed material can be used for a variety of applications. *See* ‘217 patent, col. 7, ll. 45-50.

The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 3 and 15 in view of the ‘217 patent and dismiss the Patent Owner’s attempt to narrow the teaching of the ‘217 patent to the specific problem solved by that patent. *See In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983) (“The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.”).

Issue: Claims 6, 7, 17, and 18 are not patentable over the combination of the ‘866 patent, ‘683 patent, and ‘711 patent.

The Examiner found that claims 6, 7, 17, and 18 are unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘866 patent in view of the ‘683 patent and in further view of U.S. Patent 5,789,711 (the “‘711 patent”). The Patent Owner failed to provide any response to the Examiner’s position on how the ‘711 patent satisfies the additional subject matter recited in claims 6, 7, 17, and 18. Instead, the Patent Owner merely repeated arguments related to the claims from which these dependent claims depend. For the reasons discussed above concerning independent claims 1 and 10, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 6, 7, 17, and 18.

Issue: Claims 6 and 17 are not patentable over the combination of the ‘866 patent, ‘683 patent, and ‘710 patent.

The Examiner found that claims 6 and 17 are unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘866 patent in view of the ‘683 patent and in further view of U.S. Patent 3,888,710 (the “‘710 patent”). The Patent Owner failed to provide any response to the Examiner’s position on how the ‘710 patent satisfies the additional subject matter recited in claims 6 and 17. Instead, the Patent Owner merely repeated arguments related to the claims from which these dependent claims depend. For the reasons discussed above concerning independent

claims 1 and 10, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 6 and 17.

Issue: The ‘099 patent is properly combined with the ‘866 patent and the ‘683 patent.

The Examiner found that claims 8 and 19 are unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘866 patent in view of the ‘683 patent and in further view of U.S. Patent 4,644,099 (the “‘099 patent”). The ‘099 patent teaches a flat cable. The Third Party Requester respectfully requests that the Examiner decline to accept the Patent Owner’s arguments as an improper application of the law.

The Patent Owner attempts to narrowly read the teaching of the prior art. “The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.” *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983). The Patent Owner ignores that the ‘099 patent teaches arranging cable components in a flat configuration rather and instead focuses on a secondary aspect of the disclosed embodiment. One of ordinary skill in the art would look to a variety of flat telecommunications cables, including coaxial cables, in designing a flat twisted pair cable to overcome mechanical challenges of making such a cable. *See* Declaration of Baxter at para. 22. *See also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) (“Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”).

Further, there cannot be a scope of complexity in forming a flat cable, as suggested by the Patent Owner, because the ‘095 patent fails to disclose any complexities that need to be overcome in constructing a flat cable. As such, one of ordinary skill in the art as of the priority date of the ‘095 patent, must have known how to overcome technical difficulties in configuring a flat cable, or claims 8 and 19 would be unpatentable under 35 U.S.C. § 112 for failing to satisfy the enablement requirement.

The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 8 and 19.

Issue: Claim 21 is not patentable over the combination of the ‘866 patent, ‘683 patent, and Admitted Prior Art

The Examiner rejected claim 21 as unpatentable under 35 U.S.C. § 103(a) as obvious over the '866 patent in view of the '683 patent and in further view of the Patent Owner's Admitted Prior Art. The Patent Owner repeats its unsubstantiated arguments that cabling a cable as disclosed by the combination of the '866 patent and '683 patent was not "known." The Third Party Requester respectfully requests that the Examiner disregard this argument as baseless and maintain the rejection of claim 21.

As discussed above, the only support that the Patent Owner provides for arguing that the structure of the cable disclosed by the combination of the '866 patent and the '683 patent is an unsupported statement by Mr. Gareis, an employee of the Patent Owner. As discussed above, this statement is deficient for at least the reason that Mr. Gareis appears to ignore the configuration of a foil/plastic laminate separator.

More significantly, as discussed more fully above, the '095 patent itself envisions this foil/plastic laminate separator and fails to identify any difficulty in cabling a cable with such a separator. *See* '095 patent, col. 9, ll. 10-12 ("It is to be appreciated that the cable can be twisted with any known twisting arrangement such as a helix, or an S-Z configuration."). In this way, the Patent Owner's arguments and the statements of Mr. Gareis are contrary to the '095 patent specification itself.

The Third Party Requester respectfully requests that the Examiner maintain the rejection of claim 21 in view of the Patent Owner's own Admitted Prior Art.

Issue: Claim 21 is not patentable over the combination of the '866 patent, '683 patent, and the '711 patent

The Examiner properly rejected claim 21 as unpatentable under 35 U.S.C. § 103(a) as obvious over the '866 patent in view of the '683 patent and in further view of the '711 patent. The Patent Owner argues that the combination of these references is improper because the '711 patent includes a cable with a star separator and the '866 patent discloses a cable with a flat tape separator. *See* Patent Owner's Response at 27-28. The Patent Owner improperly restricts the teachings of a prior art reference in attempting to overcome the reference. The Patent Owner ignores that the '711 patent teaches that cables can be twisted with a helical or S-Z twist. The '711 patent further discloses that these types of twisting of the entire cable "improves flexibility while preserving geometry." '711 patent, col. 5, ll. 43-45. It is this teaching that is combined with '866 patent and the '683 patent. One of ordinary skill in the art would have looked to the

‘711 patent for relevant teachings as it is titled “High Performance Data Cable,” which is the type of cable disclosed in the ‘866 patent.

The Third Party Requester respectfully submits that the Patent Owner improperly focuses on the characteristics of the separator and not the overall teaching of the ‘711 patent. The Third Party Requester respectfully requests that the Examiner decline to accept the Patent Owner’s remarks as improper and maintain the rejection of claim 21. “The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.” *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983).

Issue: Claim 22 is not patentable over the combination of the ‘866 patent, ‘683 patent, and ‘629 patent.

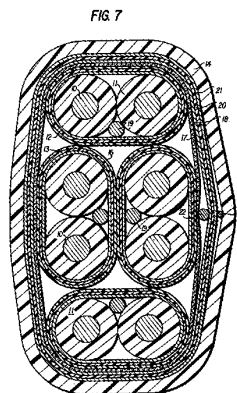
The Examiner found that claim 22 is unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘866 patent in view of the ‘683 patent and in further view of U.S. Patent 4,755,629 (the “‘629 patent”). The Patent Owner failed to provide any response to the Examiner’s position on how the ‘629 patent satisfies the additional subject matter recited in claim 22. Instead, the patent Owner repeated arguments related to claim 10, from which dependent claim 22 depends. For the reasons discussed above concerning independent claim 10, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claim 22.

Issue: Claim 23 is not patentable over the combination of the ‘866 patent, ‘683 patent, and ‘250 patent or ‘485 patent.

The Examiner found that claim 23 is unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘866 patent in view of the ‘683 patent and further in view of U.S. Patent 5,574,250 (the “‘250 patent”) or U.S. Patent No. 4,385,485 (the “‘485 patent”). The Patent Owner failed to provide a response to the Examiner’s position on how the ‘250 patent or ‘485 patent satisfies the additional subject matter recited in claim 23. Instead the Patent Owner merely repeated arguments related to claim 10, from which dependent claim 23 depends. For the reasons discussed above concerning independent claim 10, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claim 23.

Issue: The ‘346 patent in combination with the ‘866 patent renders claims 24-26 unpatentable.

The Patent Owner attempts to distinguish U.S. Patent No. 4,096,346 (the “‘346 patent”) by focusing on aspects of a disclosed embodiment that are not relevant and failing to properly consider the entire disclosure of the reference. Specifically, the ‘346 patent discloses a twisted pair cable with a binder and separators. The binder “enclose[es] the plurality of twisted pairs of insulated conductors and the dielectric pair separator, the binder having a conductive layer that faces each of the plurality of twisted pairs of insulated conductors so that the binder in combination with the dielectric pair separator provides a plurality of enclosed channels extending along a longitudinal length of the data communications cable, each enclosed channel providing crosstalk isolation between a corresponding twisted pair of insulated conductors enclosed within the channel and a remainder of the plurality of twisted pairs of insulated conductors, and providing reduced susceptibility of the twisted pair of insulated conductors to electromagnetic interference.” As seen in Figure 7 of the ‘346 patent, reproduced below, the binder (items 18/20/21) and the pair separators (items 12/13/16) satisfy this recitation of claim 24. The separators form channels, each channel enclosing a twisted pair. Further, the binder and separators are made of aluminum/mylar tape, with the aluminum conductive layer (12 for the separator and 18 for the binder) facing the twisted pairs. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) (“Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”). The ‘866 patent teaches grooves that are not completely enclosed. The combination of this teaching with the teaching of the ‘346 patent discloses each and every element of claims 24-26.



The Third Party Requester respectfully submits that the '346 patent, in combination with the '866 patent renders unpatentable under 35 U.S.C. § 103(a) claims 24-26 of the '095 patent and respectfully requests that the Examiner maintain the rejection of claims 24-26.

The Third Party Requester notes that the Patent Owner amended claim 24. This amendment does not change the application of the prior art printed publications to claim 24 nor does the Patent Owner contend that the amendment avoids the prior art. As such, the Third Party Requester respectfully asserts that amended claim 24, and dependent claims 25 and 26, should be rejected on the same grounds as previously provided by the Examiner for claims 24-26.

Issue: Claims 27-29 are not patentable over the combination of the '866 patent and Admitted Prior Art

The Examiner rejected claims 27-29 as unpatentable under 35 U.S.C. § 103(a) as obvious over the '866 patent in view of the Patent Owner's Admitted Prior Art that twisting a cable about the common axis is known. *See* '095 patent, col. 9, ll. 10-12 ("It is to be appreciated that the cable can be twisted with any known twisting arrangement such as a helix, or an S-Z configuration."). The Patent Owner repeats its unsubstantiated arguments that cabling a cable as disclosed by the '866 patent was not "known." The Third Party Requester respectfully requests that the Examiner disregard this argument as baseless and maintain the rejection of claims 27-29.

As discussed above, the only support that the Patent Owner provides for arguing that the structure of the cable disclosed by the '866 patent is an unsupported statement by Mr. Gareis, an employee of the Patent Owner. As discussed above, this statement is deficient for at least the reason that Mr. Gareis appears to ignore the configuration of a foil/plastic laminate separator disclosed in the '866 patent.

More significantly, as discussed more fully above, the '095 patent itself envisions this foil/plastic laminate separator and fails to identify any difficulty in cabling a cable with such a separator. *See. e.g.*, '095 patent, Fig. 6 and accompanying text (disclosing a separator that is a plastic/foil laminate). In this way, the Patent Owner's and Mr. Gareis' arguments are contrary to the '095 patent specification itself.

The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 27-29 over the '866 patent in view of the Patent Owner's own Admitted Prior Art.

Further, as discussed above, the '866 patent discloses a separator that is "substantially flat" as that term would be properly construed by the Examiner in a reexamination as recited in claim 27.

Issue: Claim 27-29 is not patentable over the combination of the '866 patent and the '711 patent.

The Patent Owner once again improperly restricts the teachings of a prior art reference in attempting to overcome a reference. The Examiner properly rejected claims 27-29 as unpatentable under 35 U.S.C. § 103(a) as obvious over the '866 patent in view of the '711 patent. The Patent Owner argues that the combination of these teachings is improper because the '711 patent includes a cable with a star separator and the '866 patent discloses a cable with a flat tape separator. *See* Patent Owner's Response at 27-28. The Patent Owner ignores that the '711 patent teaches that cables can be twisted with a helical or S-Z twist. *See* '711 patent, col. 5, ll. 7-8. The '711 patent further discloses that these types of twisting of the entire cable "improves flexibility while preserving geometry." '711 patent, col. 5, ll. 43-45. It is this teaching that is combined with '866 patent and the '683 patent to form the subject matter of claims 27-29 of the '095 patent. One of ordinary skill in the art would have looked to the '711 patent for teachings in view of the titled disclosure of a "High Performance Data Cable," which is the type of cable disclosed in the '866 patent. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) ("Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.").

The Third Party Requester respectfully submits that the Patent Owner improperly focuses on the characteristics of the separator and fails to properly consider the overall teaching of the '711 patent. These arguments should be ignored and the rejection of claims 27-29 maintained. "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983).

Issue: Claim 30 is not patentable over the combination of the '866 patent, the '748 patent, and either the '711 patent or the Admitted Prior Art.

In addition to the improper arguments directed to claim 27, the Patent Owner argues for the patentability of claim 30 based on the argument that the '748 patent is directed to data cable

insulation material, not pair separator material. *See* Patent Owner Response at 35. As discussed above, the Patent Owner is attempting to narrow the teachings of the ‘748 patent to its claimed invention, rather than what the patent in its entirety teaches. The Third Party Requester respectfully submits that this argument is improper. “The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.” *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983).

The Third Party Requester respectfully requests that the Examiner maintain the rejection of dependent claim 30.

Issue: Claim 31 is not patentable over the combination of the ‘866 patent and the ‘748 patent, as the ‘866 patent discloses a flat separator.

The Patent Owner repeats the same argument as to claim 31 as it did for claim 27 -- namely that the ‘866 patent fails to disclose a flat separator. *See* Patent Owner Response at 38. As discussed above, this argument attempts to improperly construe the claim term “flat” to mean flat when viewed in cross section of a finished cable. The Third Party Requester respectfully submits that the ‘866 patent discloses a flat separator as that term is properly construed. The Third Part Requester directs the Examiner to the discussion above at pages 6-10 for comments on how the ‘866 patent discloses a flat separator.

The Patent Owner attempts to enhance its argument by depicting Figure 4 of the ‘095 patent as disclosing the embodiment that includes a “flat” separator. This argument fails for at least two reasons. First, as discussed above, other embodiments refer to the separator as “flat.” Indeed, the embodiment of Figure 6 of the ‘095 patent, which the Patent Owner admits is comparable to the disclosed separator of the ‘866 patent, refers to the separator as “flat.” *See* Patent Owner Response at 38 (equating the ‘866 patent separator with the ‘095 patent separator of Figure 6).

Second, the Patent Owner has supported its remarks based on a cable view shown in Figure 4 of the ‘095 patent. Figure 5 of the ‘095 patent depicts a **cross-sectional view** of an embodiment of Figure 4. *See* ‘095 Patent, col. 5, ll. 1-2 (“Fig. 5 depicts a cross-sectional view of an embodiment of the cable of Figure 4.”). As seen in Figure 5, reproduced below, the “flat” separator is shaped with curves and grooves for the cable of the ‘095 patent, just as the separator disclosed in the ‘866 patent.

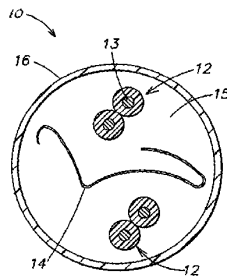


FIG. 5

The Third Party Requester respectfully submits that the ‘866 patent discloses a flat separator as that term should be construed during reexamination of claim 31. *See In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (“During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.”).

Issue: Claim 31 is not patentable over the combination of the ‘866 patent and the ‘748 patent, as the ‘748 patent discloses a foamed polymer material used for data communications cables.

The Patent Owner attempts to distinguish the subject matter of the ‘748 patent by what it claims, not what it teaches as a whole. *See* Patent Owner Response at 39. As discussed above, the ‘748 patent discloses the benefits of specific materials used in data cables. The ‘748 patent expressly states:

In general, the electrical performance of an insulating material is enhanced by foaming or expanding the corresponding solid material. Foaming also decreases the amount of flammable material employed for a given volume of material. Accordingly, a foamed material is preferably employed to achieve a favorable balance of electrical properties and flame retardancy.

‘748 patent, col. 3, ll. 20-26.

Although this disclosure of the ‘748 patent is in the context of insulation for conductors, this teaching would be considered by one of skill in the art even when choosing a material for a separator, if not just for the reduced amount of material that occurs due to foaming. *See* Baxter Declaration at para. 15. The ‘748 patent makes clear that electrical performance considerations are not limited to conductor insulation. *See* ‘748 patent, col. 3, ll. 58-60 (“The principal electrical criteria can be satisfied based upon the dielectric constant and dissipation factor of an insulation **or jacketing material.**”) (emphasis added). The Third Party Requester respectfully

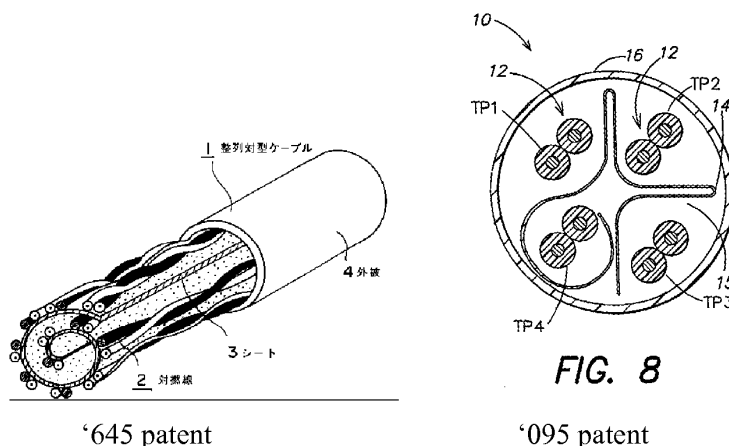
requests that the Examiner reject the Patent Owner’s attempt to restrict the teaching of the ‘748 patent to the invention as claimed in the ‘748 patent and to maintain the rejection of claim 31.

Issue: The Patent Owner failed to rebut the rejection of the claim limitations contained in claims 32 and 33.

The Third Party Requester notes that the Patent Owner’s Response does not address the disclosure of the claim limitations recited in dependent claims 32 and 33, which depend from independent claim 31. For this reason and the reasons above related to claim 31, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 32 and 33.

Issue: Claims 1, 9-13, 20, and 21 are anticipated by the Japanese ‘645 patent.

The Examiner found that Japanese Patent No. 05-290645 to Ikeda et al. (the “‘645 patent”) anticipates claims 1, 9-13, 20, and 21 (and claims 27-29, addressed below). The Patent Owner attempts to counter this finding by arguing that the ‘645 patent fails to disclose a pair separator that is not “folded” but instead is “rolled up.” See Patent Owner Response at 39. The Patent Owner is impermissibly narrowing the scope of these claims by advocating an improperly limited construction for the term “folded.” See *In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (“During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.”). As the Examiner found, the “folds” of the ‘645 patent separator are represented by the curves formed during coiling. An embodiment of the ‘645 patent is shown on the left below. The image on the right is Figure 8 of the ‘095 patent, showing similar rounded folds.



As to claim 11, the coiling “separate[s] each twisted pair of insulated conductors from every other twisted pair of insulated conductors,” as recited in claim 11. This coiling provides a bend that provides separation between adjacent pairs -- the bending of the coil increases the distance between the adjacent pairs. Pairs on one layer of the coil are separated from pairs on an outer layer of the coil by the separator material itself.

As to claim 21, the ‘645 patent discloses “wherein the plurality of twisted pairs of insulated conductors and the dielectric pair separator are twisted together in a helical manner along the longitudinal length of the data communications cable.” The Third Party Requester respectfully submits that the coiling taught in the ‘645 patent is the “twist[ing] together in a helical manner.” *See, e.g.,* WEBSTER’S 3D NEW INT’L DICTIONARY 2473 (2002) (defining twisting, among other ways, as “to cause to move with any various turning motions (as by pivoting, revolving, or **spiraling**)” (emphasis added) (excerpt provided as Exhibit 4). The ‘645 patent teaches coiling or spiraling the pair separator and twisted pairs.

The Third Party Requester respectfully requests that the Examiner reject the Patent Owner’s attempt to narrowly construe the term “fold” and maintain the rejection of claims 1, 9-13, 20, and 21.

Issue: The separator disclosed in the ‘645 patent is flat.

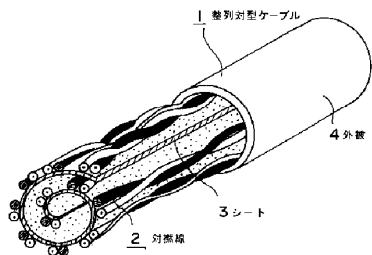
The Examiner found that the ‘645 patent anticipates claims 27-29. The Patent Owner argues that the separator disclosed in the ‘645 patent is not “flat,” as required by independent claim 27, for the same reasons as the Patent Owner argued against the separator of the ‘866 patent -- that the separator, after twisting, is not flat in the finished cable. As discussed above in connection with the ‘866 patent, the Patent Owner is impermissibly construing the term “flat” narrowly and contrary to the full scope of teachings of the ‘095 specification. *See In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007) (“During reexamination, as with original examination, the PTO must give claims their broadest reasonable construction consistent with the specification.”).

As the ‘645 patent discloses, the separator is a flat sheet, which receives the twisted pairs and then is arranged to provide additional separation of the pairs. The Third Party Requester respectfully submits that the separator disclosed in the ‘645 patent is “flat” and respectfully requests that the Examiner maintain the rejection of claims 27-29.

Issue: The ‘645 patent discloses the configurable dielectric pair separator, the first twisted pair of insulated conductors and the second twisted pair of insulated conductors twisted about a common central axis to form a twisted pair cable .

The Patent Owner further attempts to distinguish independent claim 27 by arguing that the ‘645 patent fails to disclose “the configurable dielectric pair separator, the first twisted pair of insulated conductors and the second twisted pair of insulated conductors [] twisted about a common central axis to form a twisted pair cable.” As discussed above, the Third Party Requester respectfully submits that the ‘645 patent discloses this claim limitation of independent claim 27.

The coiling or twisting of the separator and twisted pairs disclosed in the ‘645 patent is the twisting about a common central axis. See, e.g., WEBSTER’S 3D NEW INT’L DICTIONARY 2473 (2002) (defining twisting, among other ways, as “to cause to move with any various turning motions (as by pivoting, revolving, or spiraling)” (emphasis added) (excerpt provided as Exhibit 4). The ‘645 patent teaches coiling or spiraling the pair separator and twisted pairs. See Fig. 1 of the ‘645 patent. As seen in the Fig. 1 of the ‘645 patent below, the spiraling of the separator is about a common central axis.

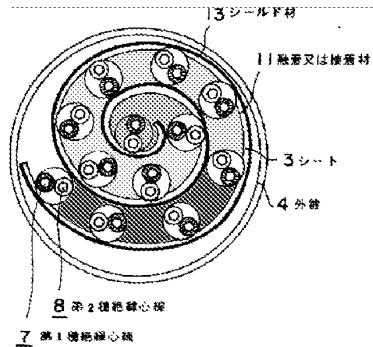


‘645 patent, Fig. 1

The Third Party Requester respectfully submits that the ‘645 patent discloses that “the configurable dielectric pair separator, the first twisted pair of insulated conductors and the second twisted pair of insulated conductors [] twisted about a common central axis to form a twisted pair cable” and respectfully requests that the Examiner maintain the rejection of claims 27-29.

Issue: The ‘645 patent discloses multiple grooves.

As the Examiner found, the coiling of the separator and the twisted pairs in the ‘645 patent forms multiple (and at least 2) grooves. As seen in the color-enhanced image below, the cable of Figure 6 of the ‘645 patent comprises multiple grooves.



‘645 patent, Fig. 6 (color added by Third Party Requester)

The Third Party Requester respectfully submits that the ‘645 patent discloses that “the separator forms at least two grooves and respectfully requests that the Examiner maintain the rejection of claims 27-29.

Issue: The ‘748 patent discloses polymer materials that can be used for the separator of the ‘645 patent.

The Examiner found that claims 2, 4, 5, 14, 16 and 30-33 are unpatentable under 35 U.S.C. § 103(a) over the ‘645 patent in view of the ‘748 patent. The Patent Owner argues that the ‘748 patent teachings are limited to insulation materials. *See* Patent Owner Response at 44. However, as discussed above in connection with comments on the combination of the ‘866 patent and the ‘748 patent, the broader teaching of the ‘748 patent covers materials used for data communications cables. *See generally* ‘748 patent, “Background of the Invention” and Table 1. This teaching includes the use of certain polymers in plenum cables and the electrical benefits of foaming the material. As the Supreme Court stated, “[c]ommon sense teaches ... that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007). Polymers of the type disclosed in the ‘748 patent can be used for the separator of the ‘645 patent to arrive at the claimed separator of the ‘095 patent. The Third Party Requester respectfully requests the Examiner to maintain the rejection of claims 2, 4, 5, 14, 16 and 30-33 over the ‘645 patent in view of the ‘748 patent.

Issue: European Patent 0 569 217 teaches woven fiberglass materials that would be used for a separator.

The Patent Owner narrowly applies the teaching of European Patent Application No. 0 569 217 (hereinafter, “the 217 patent”) in an attempt to avoid the full scope of the teachings of this prior art reference. *See* Patent Owner’s Response at 46. The Patent Owner argues that a material useful to insulating an electrical conductor would not be considered by one of ordinary skill in the telecommunications cable art to implement a pair separator. The Third Party Requester respectfully submits that this argument is neither technically correct nor consistent with the full scope of the teachings of the ‘217 patent. *See* Baxter Declaration at para. 16.

The Patent Owner attempts to distance the teaching of the ‘217 patent by stating that the reference discloses using woven fiberglass on “magnetic wire, low-voltage wiring, high-voltage cables and devices such as motors and generators.” *See* Patent Owner’s Response at 22. As explained by Mr. Baxter, this assertion is not correct. The ‘217 patent discloses a fiberglass and polymer tape that can be used as an insulating material. The reference indicates that the material can be used for a “wideranging variety of electrical current-conducting bodies or structures, including low-voltage wiring, high voltage cables and a variety of electrical devices, including motors and generators.” (col. 7, lines 45-50). These “wideranging” uses would lead one of ordinary skill in the art to consider this material for data cable applications. The teachings of the ‘217 patent extend to communications cable applications. *See* Baxter Declaration at para. 16. Indeed, the ‘217 patent teaches that the disclosed material can be used for a variety of applications. *See* ‘217 patent, col. 7, ll. 45-50.

The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 3 and 15 over the ‘645 patent in view of the ‘217 patent and dismiss the Patent Owner’s attempt to narrow the teaching of the ‘217 patent to the specific problem being solved by that patent. *See In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983) (“The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.”).

Issue: The ‘099 patent is properly combined with the ‘645 patent.

The Examiner found that claims 8 and 19 are unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘645 patent in view of the ‘099 patent. The ‘099 patent teaches a flat cable. The ‘099 patent teaches a flat cable. The Third Party Requester respectfully requests that the Examiner decline to accept the Patent Owner’s arguments as an improper application of the law.

The Patent Owner attempts to narrowly read the teaching of the prior art. “The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.” *In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983). The Patent Owner ignores that the ‘099 patent teaches arranging cable components in a flat configuration rather and instead focuses on a secondary aspect of the disclosed embodiment. One of ordinary skill in the art would look to a variety of flat telecommunications cables, including coaxial cables, in designing a flat twisted pair cable to overcome mechanical challenges of making such a cable. *See* Declaration of Baxter at para. 22. *See also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) (“Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”).

Further, there cannot be a scope of complexity in forming a flat cable, as suggested by the Patent Owner, because the ‘095 patent fails to disclose any complexities that need to be overcome in constructing a flat cable. As such, one of ordinary skill in the art as of the priority date of the ‘095 patent, must have known how to overcome technical difficulties in configuring a flat cable, or claims 8 and 19 would be unpatentable under 35 U.S.C. § 112 for failing to satisfy the enablement requirement.

The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 8 and 19 over the ‘645 patent in view of the ‘099 patent.

Issue: Claim 22 is not patentable over the combination of the ‘645 patent and ‘629 patent.

The Examiner found that claim 22 is unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘645 patent in view of the ‘629 patent. The Patent Owner failed to provide any response to the Examiner’s position on how the ‘629 patent satisfies the additional subject matter recited

in claim 22. Instead, the Patent Owner merely repeated arguments related to claim 10, from which dependent claim 22 depends. For the reasons discussed above concerning independent claim 10, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claim 22.

Issue: Claim 23 is not patentable over the combination of the ‘645 patent and ‘250 patent or ‘485 patent.

The Examiner found that claim 23 is unpatentable under 35 U.S.C. § 103(a) as obvious over the ‘645 patent in view of either the ‘250 patent or ‘485 patent. The Patent Owner failed to provide any response to the Examiner’s position on how the ‘250 patent or ‘485 patent satisfies the additional subject matter recited in claim 23. Instead, the Patent Owner merely repeated arguments related to claim 10, from which dependent claim 23 depends. For the reasons discussed above concerning independent claim 10, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claim 23.

Issue: The ‘346 patent in combination with the ‘645 patent renders claims 24-26 unpatentable.

The Patent Owner attempts to distinguish the ‘346 patent by focusing on aspects of a disclosed embodiment that are not relevant and failing to properly consider the entire disclosure of the reference. *See* Patent Owner’s Response at 49-50. Specifically, the ‘346 patent discloses a twisted pair cable with a binder and separators. The binder “enclose[es] the plurality of twisted pairs of insulated conductors and the dielectric pair separator, the binder having a conductive layer that faces each of the plurality of twisted pairs of insulated conductors so that the binder in combination with the dielectric pair separator provides a plurality of enclosed channels extending along a longitudinal length of the data communications cable, each enclosed channel providing crosstalk isolation between a corresponding twisted pair of insulated conductors enclosed within the channel and a remainder of the plurality of twisted pairs of insulated conductors, and providing reduced susceptibility of the twisted pair of insulated conductors to electromagnetic interference.” As seen in Figure 7 of the ‘346 patent, reproduced above in connection with the comments on the ‘346 patent in combination with the ‘866 patent, the binder (items 18/20/21) and the pair separators (items 12/13/16) satisfy this recitation of claim 24. The separators form channels, each channel enclosing a twisted pair. Further, the binder and separators are made of

aluminum/mylar tape, with the aluminum conductive layer (12 for the separator and 18 for the binder) facing the twisted pairs. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007) (“Common sense teaches, however, that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.”). The ‘866 patent teaches grooves that are not completely enclosed. The combination of this teaching with the teaching of the ‘346 patent discloses each and every element of claims 24-26.

The Third Party Requester respectfully submits that the ‘346 patent in combination with the ‘645 patent renders unpatentable under 35 U.S.C. § 103(a) claims 24-26 of the ‘095 patent and respectfully requests that the Examiner maintain the rejection of claims 24-26.

Issue: Patent Owner has admitted that a cross-web separator satisfies the claim elements of independent claims 1 and 10 and dependent claims 6, 9, 11, 13, 17, and 20-22.

The Patent Owner argues that the ‘711 patent, which discloses a cross-web separator or “star separator,” does not satisfy claim limitations requiring the separator be “folded and arranged” (claim 1) or have “folds” (claim 10). *See* Patent Owner Response at 51-52. The Third Party Requester respectfully submits that the Patent Owner has admitted that a cross-web separator formed in a similar manner as that disclosed in the ‘711 patent satisfies these claim limitations.

In litigation involving the ‘095 patent, the patent owner has accused a product with a cross-web separator as infringing independent claims 1 and 10 of the ‘095 patent. In other words, the Patent Owner has broadly construed the claimed separator of claims 1 and 10 of the ‘095 patent to cover a cross-web separator. *See* Exhibit 5, “Appendix to Belden’s Second Supplemental Responses to Interrogatories,” at 11 (accusing 10Gain Category 6A CMR/CMP; NextGain Category 6eX CMR/CMP, and OSP Broadband Category 6 cables) (Mar. 9, 2009) (asserting claim 1 against products with cross-web separators). The Patent Owner now wants to retreat from its position.

The Third Party Requester respectfully submits that, by attempting to knowingly assert its patent claims against a cable with a cross-web separator in a signed paper governed by Rule 33 of the Federal Rules of Civil Procedure, the Patent Owner has admitted that a reasonable (albeit broad) construction of the terms “folded and arranged” or “folds” would include an extruded preform separator such as a cross web. As such, the Third Party Requester respectfully

requests that the Examiner decline to consider the Patent Owner's position reversal and maintain the rejection of claims 1, 6, 9-11, 13, 17 and 20-22 based on the '711 patent.⁴

Issue: The '748 patent discloses materials that can be used for the separator of the '711 patent.

The Examiner found that claims 2, 5, and 16 are unpatentable under 35 U.S.C. § 103(a) over the '711 patent in view of the '748 patent. The Patent Owner again argues that the '748 patent teachings are limited to insulation materials. *See* Patent Owner Response at 52-53. However, as discussed above in connection with comments on the combination of the '866 patent and the '748 patent, the broader teaching of the '748 patent covers materials useful for data communications cables. Indeed, one of ordinary skill in the art would apply the teaching of the '748 patent to arrive at a "suitable copolymer" for the separator of the '711 patent because the '748 patent teaches suitable materials for a communications cable. *See* '711 patent, col. 4, ll. 57-58 ("One may select a suitable copolymer [for the star separator]."). As the Supreme Court stated, "[c]ommon sense teaches ... that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420 (2007). The Third Party Requester respectfully requests the Examiner to maintain the rejection of claims 2, 5, and 16 over the '711 patent in view of the '748 patent.

Issue: Claim 23 is not patentable over the combination of the '645 patent and '250 patent or '485 patent.

The Examiner found that claim 23 is unpatentable under 35 U.S.C. § 103(a) as obvious over the '711 patent in view of either the '250 patent or '485 patent. The Patent Owner failed to provide any response to the Examiner's position on how the '250 patent or '485 patent satisfies the additional subject matter recited in claim 23. Instead, the Patent Owner merely repeated arguments related to claim 10, from which dependent claim 23 depends. For the reasons discussed above concerning independent claim 10, the Third Party Requester respectfully requests that the Examiner maintain the rejection of claim 23.

⁴ The Patent Owner failed to provide any additional bases for the patentability of claims 6 and 9, which depend from claim 1 and claims 11, 13, 17 and 20-22, which depend from claim 10.

The Patent Owner's "Secondary Considerations" Should Be Given Little Or No Weight

Issue: Mr. Niemiera's Declaration and the Patent Owner's Response, at pages 13-14, fail to provide adequate support for any secondary considerations.

"To be given substantial weight in the determination of obviousness or nonobviousness, evidence of secondary considerations must be relevant to the subject matter as claimed, and therefore the examiner must determine whether there is a nexus between the merits of the claimed invention and the evidence of secondary considerations." MANUAL OF PATENT EXAMINING PRACTICE § 716.01(b) (Rev. 7, Jul. 2008). "The term 'nexus' designates a factually and legally sufficient connection between the objective evidence of nonobviousness and the claimed invention so that the evidence is of probative value in the determination of nonobviousness." *Id.* Mr. Niemiera's proffered "evidence" does not satisfy the Patent Office's standard as evidence of secondary considerations.

Mr. Niemiera's Declaration, at paragraph 6, states that "at the priority date of the ['095 patent], the high-speed cable industry had been experiencing a long-felt and persistent need to find a viable alternative that could satisfy Category 6 performance requirements, but without the expense and other technical disadvantages associated with the various prior art approaches. These prior approaches to varying degrees all represented failed attempts to strike this desired price/performance balance." Mr. Niemiera fails to provide any objective evidence that a "long-felt need" existed at the time of the priority date of the '095 patent, just an unsupported statement. Mr. Niemiera does not provide any nexus between the claimed invention and this supposed "long-felt need." If any long-felt need did exist, the only possible nexus that Mr. Niemiera provides is with the TIA/EIA Category 6 requirements. None of the claims for the '095 patent specify meeting the Category 6 requirements as a claim limitation. According to Mr. Niemiera, this "long-felt need" would have been initiated by the Category 6 standard. Although the first draft "Category 6" standards were released in September of 1997, the standards were not finalized **until June of 2002**. It is inconsistent to have a "long-felt need" to satisfy requirements that evolved over 5 years and were finalized almost two-and-one-half years **after** the priority date of the '095 patent.

Even the Patent Owner's own public documents counter this "long-felt need." First, Mr. Niemiera states, in paragraph 6, that the long-felt need was to find a viable alternative cable that satisfied Category 6 standards but without the rigid pair separators of the prior art. Mr. Paul

Kish (an employee of the Patent Owner) stated that “Category 6 cables are manufactured with larger copper conductors and may include an internal divider called a cross-web that serves to separate the pairs within the cable and reduce cross-talk noise. *The cross-web divider to separate the pairs is not a specified requirement of the Cat 6 standard, and some manufacturers have developed designs and processes that deliver full Cat 6 compliance without the use of any physical dividers between pairs.*” Paul Kish, *Category 6 Cabling Questions and Answers* at 3, July 2002, available at http://www.belden.com/pdfs/Techpprs/What_is_Category_6_Q&A.pdf (last visited Nov. 10, 2009) (emphasis added) (Attached as Exhibit 6).⁵ As seen from this statement, cables existed that met the Category 6 standards and did not have any pair separator. As such, there could not be a “long-felt need” for a cable with a configurable pair separator.

Also, Mr. Kish’s paper states that: A frequently asked question is why do we need Category 6? Isn’t Category 5e good enough for what is needed today and in the foreseeable future? The answer is ‘probably Yes.’ *Id.* at 5. This statement at least suggests that, as of July 2002, over three years after the priority date of the ‘095 patent, the lesser Category 5e performance was sufficient. Category 5e performance is met with cables without pair separators. *See* Baxter Declaration at para. 18.

Mr. Niemiera also states that “[w]e were able to overcome industry skepticism with test results showing that tape separator products are able to consistently meet all of the Category 6 performance requirements.” Declaration of Gregory Niemiera at para. 7 (Nov. 23, 2009) (attached to Patent Owner’s Response). Mr. Niemiera fails to provide any objective evidence (industry white papers, statements from other industry personnel, ...) in support of his statement about “industry skepticism.” As Mr. Baxter, who was an active member of the cable industry including the standards bodies, declares, he was not aware of any such skepticism. *See* Baxter Declaration at para. 19. And again, Mr. Niemiera seems to show a nexus between Category 6 requirements and alleged “skepticism.” No claim of the ‘095 patent includes a claim element

⁵ At the time Mr. Kish wrote this paper, he was with NORDX/CDT. NORDX/CDT was acquired by Belden, the Patent Owner. As can be seen from the citation for the paper, the paper is available on Belden’s website. As recently as July 2009, Mr. Kish was Director, Systems and Standards at Belden. *See Standards Update: Greening of the Data Centre*, available at <http://www.belden.com/pdfs/Techpprs/cnsstandardsjulaug2009.pdf> (last visited Nov. 10, 2009) (providing Mr. Kish’s title).

directed to Category 6 requirements. As such, there is no nexus with the claims of the '095 patent.

Finally, Mr. Niemiera declares that the Patent Owner has “enjoyed tremendous commercial success in selling cable products that embody the claimed tape separator” Declaration of Gregory Niemiera at para. 8 (Nov. 23, 2009) (attached to Patent Owner’s Response). Neither Mr. Niemiera nor the Patent Owner’s Response (page 14) provide any nexus between the alleged “commercial success” and the patented invention. *See In re DBC*, 545 F.3d 1373, 1384 (Fed. Cir. 2008) (“We have held on a number of occasions that evidence of commercial success alone is not sufficient to demonstrate nonobviousness of a claimed invention. Rather, the proponent must offer proof ‘that the sales were a direct result of the unique characteristics of the claimed invention--as opposed to other economic and commercial factors unrelated to the quality of the patented subject matter.’”).

Other factors were a force in category cable sales beginning in 2006, including a commercial real estate boom. This boom generated a great demand for all types of cable. This demand, and not the patented features of the '095 patent, drove the sales of Mohawk’s 6 LAN product. *See Construction Market Forecasting Service, Analysis and Forecasts of National and Regional Construction Markets* (2008) (showing increases in non-residential and commercial construction) (provided herein as Exhibit 7). Another factor affecting these sales is the advent of the 10 Gb/s Ethernet (referred to as 10GBASE-T) standard (IEEE 802.3AN). This standard issued in June of 2006. The publicity surrounding this standard and the need for Category 6-compliant cables to satisfy the standard was a factor in the increased sales of category 6 cables. *See Baxter Declaration* at para. 21.

The Patent Owner states, at page 14 of its Response, of an “observation by the Patent Owner of possible copying by their competition.” The Patent Owner provides **no evidence at all** that supports this “observation” that the patented technology has been **copied**. The only support offered by the Patent Owner is a reference to paragraphs 5-10 of Mr. Niemiera’s Declaration. The only paragraph in the Niemiera Declaration that might suggest copying is paragraph 10, which states:

As a further evidence of commercial success, I note that several of Belden's competitors who are among the top five largest suppliers of copper cables in the U.S. marketplace -- e.g., General Cable; Superior Essex; Commscope -- are also now selling significant tape separator product lines. In

fact, Belden is currently prosecuting a pending patent infringement litigation against Superior Essex concerning the above-identified patent and other patents in its family.⁶

Nowhere in this paragraph does Mr. Niemiera indicate that any competitor **copied** the cables of the '095 patent. The Third Party Requester is aware of no evidence provided by the Patent Owner during the current litigation to support any alleged copying. As the Patent Owner has not provided any other support for its statement, this baseless assertion should be given no weight. "The arguments of counsel cannot take the place of evidence in the record." MANUAL OF PATENT EXAMINING PRACTICE § 716.01(c) (Rev. 7, Jul. 2008).

The Patent Owner characterizes the performance results of a cable embodying the invention of the '095 patent as unexpected, referring to test results provided by Mr. Niemiera. See Patent Owner Response at 14. These results show that the cable satisfies Category 6 requirements. See Declaration of Gregory Niemiera at para. 7 (Nov. 23, 2009) (attached to Patent Owner's Response). However, these results **cannot be unexpected**. As the Patent Owner itself states in a public document, **cables with no separator at all satisfy Category 6 requirements**. See Paul Kish, *Category 6 Cabling Questions and Answers* at 3, July 2002, available at http://www.belden.com/pdfs/Techpprs/What_is_Category_6_Q&A.pdf (last visited Nov. 10, 2009) (Exhibit 6).

Also, Mr. Kish's statement that cables were constructed that met Category 6 standards that had no separator seems to cast doubt on any real industry skepticism - why would the industry be skeptical that a cable with a tape separator met Category 6 requirements when a cable without a separator met the requirements. See Paul Kish, *Category 6 Cabling Questions and Answers* at 3, July 2002, available at http://www.belden.com/pdfs/Techpprs/What_is_Category_6_Q&A.pdf (last visited Nov. 10, 2009).⁷

⁶ Mr. Niemiera includes the Third Party Requester in his list of companies. The Patent Owner has not established any evidence, either during litigation or in its Response that the Third Party Requester has copied any product of the Patent Owner.

⁷ Mr. Niemiera references test results in his Declaration. All these test results do is confirm that, more than three years after the priority date of the '095 patent, a 6 LAN cable satisfied Category 6 performance requirements. Again, as Mr. Kish noted in his July 2002 paper, cables **with no separator** satisfied the Category 6 requirements. Mr. Niemiera's test data proves nothing regarding a nexus between the claimed invention and market success.

The Third Party Requester respectfully requests that the Examiner disregard Mr. Niemiera's Declaration and the Patent Owner's remarks concerning secondary considerations. The Patent Owner has failed to provide sufficient support for these considerations as it has failed to provide a nexus between the considerations and the patented invention.

Patent Owner's Support For New Claims Is Deficient under 35 U.S.C. § 112

Newly-added claim 34 recites (emphasis added):

34. (new) An unshielded twisted pair (UTP) data communications cable **consisting of:**

four twisted pairs of insulated conductors consisting of a first twisted pair, a second twisted pair, a third twisted pair and a fourth twisted pair;

a configurable dielectric pair separator disposed among the four twisted pairs and **arranged to separate the first twisted pair from the second twisted pair** along a length of the UTP data communications cable, **the configurable dielectric pair separator being substantially flat in a plane of a radial cross-section of the UTP data communications cable** and consisting of a nonconductive tape; and

a jacket enclosing the four twisted pairs of insulated conductors and the configurable dielectric pair separator;

wherein the configurable dielectric pair separator and the four twisted pairs of insulated conductors are twisted about a common central axis to form the UTP data communications cable; and

wherein the configurable dielectric pair separator is arranged within the jacket to form at least two grooves, the first twisted pair being disposed at least partially within a first groove of the at least two grooves and the second twisted pair being disposed at least partially within a second groove of the at least two grooves.

This new claim uses the transitional phrase "consisting of." This transitional phrase limits the device to the recited elements. Further, the new claim recites "four twisted pairs of insulated conductors" and a configurable pair separator where "the configurable dielectric pair separator being substantially flat in a plane of a radial cross-section of the UTP data communications cable." The Third Party Requester respectfully submits that the specification of the '095 patent fails to support this claim.

The Patent Owner contends that the configuration of the pair separator is supported by Figure 4. *See* Patent Owner's Response, Appendix A. However, the embodiment of Figure 4 shows **only two twisted pairs of insulated conductors**. Similarly, Figure 5, the cross-sectional view of an embodiment of Figure 4 also shows **only two twisted pairs**. Nowhere does the '095 patent suggest that the embodiments of Figures 4 and 5 can have more than 2 twisted pairs and,

more specifically, four and only four twisted pairs. The figures are reproduced below. Additionally, Figures 4 and 5 disclose an embodiment where each twisted pair is separated from each other twisted pair. However, newly-added claim 34, as drafted, would allow two twisted pairs adjacent to one another on one side of the separator and two twisted pairs adjacent to one another on the other side of the separator. No embodiment of the '095 patent discloses this configuration.

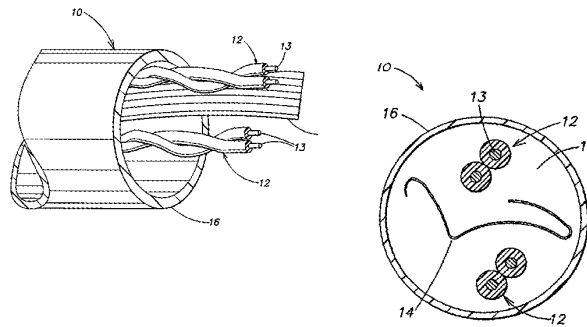


FIG. 4

FIG. 5

'095 Patent

The Third Party Requester respectfully submits that newly-added independent claim 34 and newly-added dependent claims 34-39 are not supported by the specification and represent new matter. The Third Party Requester respectfully requests that the Examiner reject claims 34-39 as constituting new matter.

Newly-added independent claim 40 recites (emphasis added):

40. (new) An unshielded twisted pair (UTP) data communications cable **consisting of:**

four twisted pairs of insulated conductors consisting of a first twisted pair, a second twisted pair, a third twisted pair and a fourth twisted pair;

a configurable dielectric pair separator disposed among the four twisted pairs and **arranged to separate the first twisted pair from the second twisted pair** along a length of the UTP data communications cable, **the configurable dielectric pair separator being substantially flat in a plane of a radial cross-section of the UTP data communications cable** and consisting of a nonconductive foamed polymer tape; and

a jacket enclosing the four twisted pairs of insulated conductors and the configurable dielectric pair separator;

wherein the configurable dielectric pair separator and the four twisted pairs of insulated conductors are twisted about a common central axis to form the UTP data communications cable.

As can be seen, newly-added independent claim 40 has similar claim language. The Patent Owner again relies on Figure 4 for support for this claim. *See* Patent Owner's Response, Appendix A. For the reasons stated above, the Third Party Requester respectfully submits that newly-added independent claim 40 is not supported by the specification and represents new matter. The Third Party Requester respectfully requests that the Examiner reject claim 40 as constituting new matter.

New Claims Are Not Patentable Over Prior Art Printed Publications

The Patent Owner has amended independent claim 24⁸ and added claims 34-40, with claims 34 and 40 being independent claims. In addition to improperly claiming new matter that is not disclosed in the '095 patent, as discussed above, the claims are not patentable over the prior art of record. Newly-added claims 34-40 are unpatentable under 35 U.S.C. § 102(b) as anticipated by the '866 patent or, alternatively, unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of other prior art references. DE 297 19 866 A1 (the "'866 patent'") was published February 5, 1998. Since the application that led to the '095 Patent was filed on May 11, 2001, the '866 patent is prior art to the '095 patent under 35 U.S.C. § 102(b). The '866 patent discloses a data transmission cable with a pair separator. The '866 patent was not considered by the Patent Office during prosecution of the application that matured into the '095 patent. Specifically:

Anticipation

- Claims 34 and 39 are unpatentable under 35 U.S.C. § 102(b) as anticipated by the '866 patent.

Obviousness

- Claim 34 is unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the '683 patent;
- Claim 34 is unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the Admitted Prior Art;
- Claim 34 is unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the '683 patent and the Admitted Prior Art;
- Claims 35-37 are unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the '748 patent;

⁸ The unpatentability of claim 24 is addressed in the specific comments above.

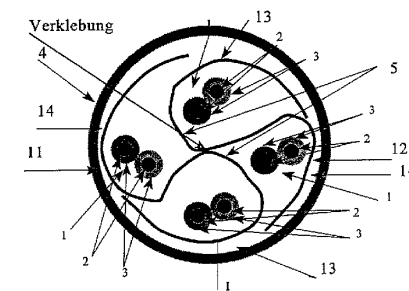
- Claims 35-37 are unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the ‘683 patent;
- Claims 35-37 are unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the Admitted Prior Art;
- Claims 35-37 are unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the ‘683 patent and the Admitted Prior Art;
- Claims 38 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent;
- Claims 38 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the ‘683 patent;
- Claims 38 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the Admitted Prior Art;
- Claims 38 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the ‘683 patent and the Admitted Prior Art;
- Claim 39 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘683 patent;
- Claim 39 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the Admitted Prior art;
- Claim 39 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘683 patent and the Admitted Prior Art;
- Claim 40 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent;
- Claim 40 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the ‘683 patent;
- Claim 40 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the Admitted Prior Art; and
- Claim 40 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent and in further view of the ‘683 patent and the Admitted Prior Art.

Independent claim 34

Independent claim 34 recites an unshielded twisted pair (UTP) data communications cable. The ‘866 patent discloses an unshielded twisted pair data communications cable.

Claim limitation [34a] recites **four twisted pairs of insulated conductors consisting of a first twisted pair, a second twisted pair, a third twisted pair and a fourth twisted pair.** The ‘866 patent discloses a data communications cable consisting of four twisted pairs of insulated conductors. “An invention-specific data transmission cable depicted in figure 1 has

four pairs 1 of insulated, stranded copper conductors 2 or cants. These copper conductors or cants may optionally have a conductor coating made of tin, for example. The effective diameter of these copper conductors or cants especially is 0.4 to 0.66 mm. The copper conductor or cants preferably have an insulation 3 consisting of a thermoplastic, especially polyethylene, cellular polyethylene, foam-skin polyethylene, skin-foam-skin polyethylene, polypropylene or cellular polypropylene. ... The embodiment of an invention-specific data transmission cable as per figure 2 differs from the embodiment form as per figure 1 in that the round section 13 of the partial shields 11, 12 is completely closed, so that the end area of the round section is in contact with the arc-shaped section 14. The embodiment as per figure 3 of an invention-specific data transmission cable differs from that as per figure 2 in that the round sections 13 of the two partial shields 11, 12 run within the cable cross section in such a way that they touch roughly in the cable center. Here, according to the invention, the two partial shields 11, 12 can be glued.” ‘866 patent, Eng. trans. at 3-5. As such, Figure 3 depicts a single pair separator. Figure 3 is depicted below.



Figur 3

‘866 patent, Figure 3

Claim limitation [34b] recites **a configurable dielectric pair separator disposed among the four twisted pairs and arranged to separate the first twisted pair from the second twisted pair along a length of the UTP data communications cable, the configurable dielectric pair separator being substantially flat in a plane of a radial cross-section of the UTP data communications cable and consisting of a nonconductive tape.** The ‘866 patent discloses a configurable pair separator as “being substantially flat in a plane of a radial cross-section of the UTP data communications cable.” As seen in the side-by-side comparison of a disclosed cable of Figure 3 the ‘866 patent and Figure 6 of the ‘095 patent, both cables show substantially-flat cables in the cable cross section. In the case of the ‘866 patent, the

configurable flat pair separator has been configured to partially surround a twisted pair. In the case of the embodiment of Figure 6 of the '095 patent, which is termed as “flat” by the specification of the '095 patent, the pair separator has been configured into a “+” shape.⁹ Figure 3 of the '866 patent discloses a single pair separator (that is, “consists of” a pair separator), as the two partial separators have been “glued” at the central location (“verklebung” translates to “bonding” or “gluing”).

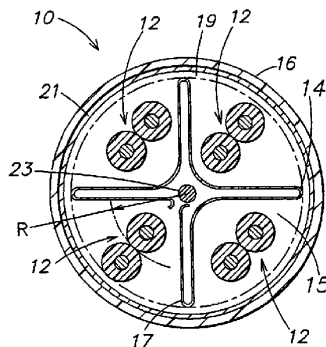


FIG. 6

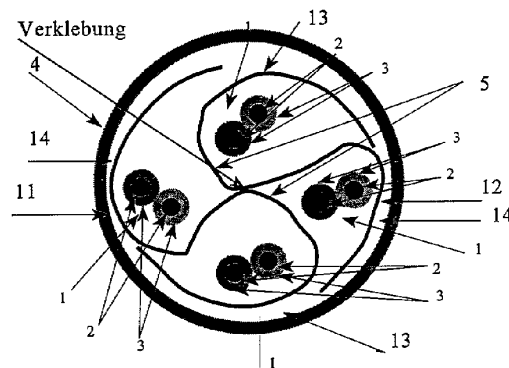


Figure 3

“Substantially flat” separators (‘095 patent embodiment on left).

As seen in Figure 3 of the '866 patent, the pair separator is “arranged to separate the first twisted pair from the second twisted pair along a length of the UTP data communications cable.” As seen in Figure 3 above, the pair separator separates the twisted pair at the “6 o’clock position” in the figure from the twisted pair at the “9 o’clock position” (indeed, the separator separates each pair from each other pair).

The '866 patent discloses a data communications cable that consists of a non-conductive tape. The '866 patent discloses that the separator can be a combination of a foil and plastic laminate. In a configuration where the plastic laminate completely encases the foil, the tape separator is “non-conductive.” That is, a separator that includes foil yet is totally encased in plastic is non-conductive as the plastic serves to insulate the foil component.

⁹ As discussed above, to the extent that the Patent Owner attempts to limit the “substantially flat” recitation of this claim 34 to mean “seen as a straight line in cross section,” the third Party Requester respectfully submits that this cable configuration is not supported by the specification of the '095 patent.

Claim limitation [34c] recites **a jacket enclosing the four twisted pairs of insulated conductors and the configurable dielectric pair separator**. The ‘866 patent discloses a cable consisting of a jacket. Item 4 in Figure 3 of the ‘866 patent above is a jacket that encloses the four twisted pairs and the separator. *See also*, ‘866 patent, Eng. trans. at 3 (“As an outer mechanical protection, an invention-specific transmission cable has a cable cover 4, which consists of customary thermoplastic cover materials.”).

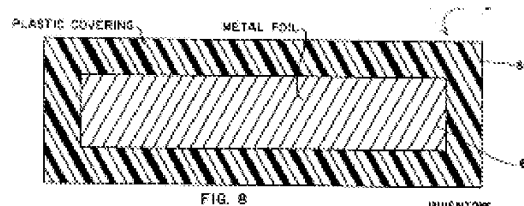
Claim limitation [34d] recites **wherein the configurable dielectric pair separator and the four twisted pairs of insulated conductors are twisted about a common central axis to form the UTP data communications cable**. The ‘866 patent discloses a cable where the twisted pairs and pair separator are twisted about a common central axis. “An invention-specific data transmission cable, as described above, can be manufactured so that the partial shieldings 11, 12 or 17, 18 can be applied together with the stranding of conductor pairs 1 **and/or longitudinal reshaping** of the conductor pairs 1.” ‘866 patent, Eng. trans. at 6. This “longitudinal reshaping” is the twisting about a central axis. *See* Declaration of Baxter at para. 11.

Claim limitation [34e] recites **wherein the configurable dielectric pair separator is arranged within the jacket to form at least two grooves, the first twisted pair being disposed at least partially within a first groove of the at least two grooves and the second twisted pair being disposed at least partially within a second groove of the at least two grooves**. The configurable pair separator of the ‘866 patent is arranged to form at least two grooves. As seen in Figure 3 of the ‘866 patent, above, the lower pair separator has two grooves with one twisted pair in one groove and one twisted pair in another groove.

According, claim 34 is unpatentable under 35 U.S.C. § 102(b) as anticipated by the ‘866 patent.

To the extent that the Patent Owner attempts to argue that the ‘866 patent does not disclose a dielectric pair separator consisting of non-conductive tape, U.S. Patent No. 3,622,683 (the “‘683 patent”) discloses such a separator. The ‘683 patent issued November 23, 1971, making it prior art under 35 U.S.C. § 102(b) to the ‘095 patent. As shown in Figure 8 of the ‘683 patent, depicted below, the tape separator has a foil member completely encased in plastic. This tape separator configuration is a “non-conductive” tape. That is, since the foil is totally encased in plastic, it is totally insulated and the separator is a “non-conductive” tape. Alternatively, the

'683 patent teaches that there is a finite number of arrangements for a pair separator. Given that the foil element adds cost to the cable, one skilled in the art would be motivated to try a cable with no foil component, that is, remove the foil from the '866 patent separator, leaving just a plastic separator - one of the finite number of arrangements for the separator. See *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) ("When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp."). Also, in the U.S. market, one of ordinary skill in the art would be motivated to try a configuration without the foil, as in the U.S., cable manufacturers had a preference for unshielded cables. See Declaration of Baxter at para. 12-13. Such a separator, with no foil component, would be "non-conductive."



Reasons to combine the '866 patent and the '683 patent

Both the '866 patent and '683 patent relate to improving cross-talk in telecommunications cables. Both patents teach employing flat separators, including separators with foil and plastic laminate. It would have been obvious to one of ordinary skill in the art to combine the teaching from the '683 patent of a separator that totally encases the foil component in plastic, making the separator non-conductive, with the cable of the '866 patent. Further, one of ordinary skill in the art would have a reasonable expectation of success of using the separator configuration of the '683 patent with the cable structure of the '866 patent because of the substantial overlap of technology and the predictable result of combining them (indeed, the '683 patent shows a variety of foil/plastic laminate separators).

According, claim 34 is unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the '683 patent.

To the extent that the Patent Owner attempts to argue that the '866 patent does not disclose "the configurable dielectric pair separator and the four twisted pairs of insulated conductors are twisted about a common central axis to form the UTP data communications

cable,” this claim limitation is obvious in view of the Patent Owner’s Admitted Prior Art.¹⁰ The ‘095 patent itself discloses that twisting a cable closed was known to one of ordinary skill in the art. *See* ‘095 patent, col. 9, ll. 10-12 (“It is to be appreciated that the cable can be twisted with any known twisting arrangement such as a helix, or an S-Z configuration.”).

Reasons to combine the ‘866 patent, the ‘683 patent and the Admitted Prior Art

All of the patents relate to data communications cables. Please see the previous discussion above with regard to reasons to combine the teachings of the ‘866 patent and the ‘683 patent. Additionally, the Admitted Prior Art in the ‘095 patent teaches that helical or S-Z twisting of a cable are known processes. It would have been obvious to one of ordinary skill in the art to twist the components of the ‘866 patent as described in the Admitted Prior Art of the ‘095 patent to achieve the subject matter of claim 34. *See also*, Declaration of Baxter, para. 17. Further, one of ordinary skill in the art would have a reasonable expectation of success of using such a combination because of the substantial overlap of technology and the predictable result of combining them. None of the references provide any reasons contrary to the combination.

According, claim 34 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the Admitted Prior Art (and, alternatively in further view of the ‘683 patent).

Claim 35

Newly-added claim 35 recites **[t]he unshielded twisted pair (UTP) data communications cable as claimed in claim 34, wherein the non-conductive tape comprises a foamed polymer.** As the Examiner has already determined, U.S. Patent 5,670,748 (the “‘748 patent”) discloses materials for use in data cables, including foamed polymers. For example, the ‘748 patent discloses fluorinated ethylene propylene (FEP) polymer (among other materials) for use in data cables to achieve flame retardancy and minimize smoke. The ‘748 patent is directly related to materials used for flame retardancy and smoke suppression in data communications cables. *See generally*, ‘748 patent. The ‘748 patent issued Sep. 23, 1997, qualifying it as prior art under 35 U.S.C. § 102(b).

The ‘748 patent further discloses “the electrical performance of an insulating material is enhanced by foaming or expanding the corresponding solid material. Foaming also decreases the amount of flammable material employed for a given volume of material. Accordingly, a foamed

¹⁰ The Examiner has also concluded that the prior art ‘711 patent teaches helical or S-Z twisting of a cable to finish the cable.

material is preferably employed to achieve a favorable balance of electrical properties and flame retardancy.” *See* ‘748 patent, Table 1 and col. 3, ll. 11-25.

Although the ‘748 patent claims are directed to a composition of materials for use to insulate a conductor, the “Background of the Invention” section discusses electrical and fire retardancy properties of materials used in cables generally. One of ordinary skill in the art would have recognized this general teaching of the ‘748 patent to modify the teaching of the ‘866 patent to arrive at the recitation of new claim 35. *See* ‘748 patent, col. 2, l. 1 - col. 3, l. 25. One of ordinary skill in the art would have known to combine the foamed polymer disclosed in the ‘748 patent with the pair separator of the ‘866 patent, to arrive at the recitation of claim 35. *See* Baxter Declaration at para. 14-15, 20. *See also, In re Heck*, 699 F.2d 1331, 1333 (Fed. Cir. 1983) (“The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain.”).

Reasons to combine the ‘866 patent and the ‘748 patent

Both the ‘866 patent and ‘748 patent relate to data communications cables. The ‘748 patent is specifically related to the types of materials that are optimal to meet fire and electrical standards. The ‘748 patent demonstrates that one of ordinary skill in the art would have known that certain materials may be used to achieve flame retardance without degrading cable transmission performance. It would have been obvious to one of ordinary skill in the art to combine the materials of the ‘748 patent with the cable structure of the ‘866 patent to achieve the subject matter of claim 35. Further, one of ordinary skill in the art would have a reasonable expectation of success of using the materials of the ‘748 patent with the cable structure of the ‘866 patent because of the substantial overlap of technology and the predictable result of combining them. *See* Baxter Declaration at para. 14-15, 20.

Accordingly, claim 35 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent (and, alternatively in further view of the Admitted Prior Art and/or the ‘683 patent as applied in connection with claim 34).

Claim 36

Newly-added claim 36 recites **[t]he unshielded twisted pair (UTP) data communications cable as claimed in claim 35, wherein the non-conductive tape comprises a low dielectric constant, low dissipation factor foamed polymer.** As the Examiner has already

determined, the '748 patent discloses materials for use in data cables, including foamed polymers. One of the disclosed foamed polymers is FEP, "a low dielectric constant, low dissipation factor foamed polymer." See '748 patent, Table 1. The '095 patent itself defines FEP as "a low dielectric constant, low dissipation factor foamed polymer." See '095 patent, col. 5, ll. 25-30.

Reasons for combining the '748 patent with the '866 patent are provided above, in connection with claim 35.

Accordingly, claim 36 is unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the '748 patent (and, alternatively in further view of the Admitted Prior Art and/or the '683 patent as applied in connection with claim 34).

Claim 37

Newly-added claim 37 recites **[t]he unshielded twisted pair (UTP) data communications cable as claimed in claim 36, wherein the non-conductive tape comprises one of a foamed flame retardant, cellular polyolefin, a foamed flame retardant fluoropolymer, foamed fluorinated ethylene propylene (PEP), and foamed polyvinyl chloride (PVC).** As the Examiner has already determined, the '748 patent discloses materials for use in data cables, including foamed polymers. One of the disclosed foamed polymers is FEP, "a low dielectric constant, low dissipation factor foamed polymer." See '748 patent, Table 1. The '095 patent itself defines FEP as "a low dielectric constant, low dissipation factor foamed polymer." See '095 patent, col. 5, ll. 25-30.

Reasons for combining the '748 patent with the '866 patent are provided above, in connection with claim 35.

Accordingly, claim 37 is unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the '748 patent (and, alternatively in further view of the Admitted Prior Art and/or the '683 patent as applied in connection with claim 34).

Claim 38

Newly-added claim 38 recites **[t]he unshielded twisted pair (UTP) data communications cable as claimed in claim 34, wherein the non-conductive tape comprises a woven fiberglass tape.** As the Examiner has already determined, European Patent Application No. 0 569 217 (the "'217 patent") discloses woven fiberglass tape material. The '217 patent

published on October 11, 1993 and is therefore prior art to the '095 patent under 35 U.S.C. 102(b).

The woven fiberglass disclosed in the '217 patent is cut into tape and used as insulating material. *See, e.g.*, '217 patent, Abstract (“The composite sheet is then slit into tapes with substantially no unraveling of the fiberglass component at the slit edges of the tapes. The resultant tapes are easily wrapped on, and adhered to, conductors, such as magnet wire, or the like, by remelting and resolidifying the thermoplastic layer. The tape possesses excellent dielectric properties”). One of ordinary skill in the art would have known to combine the woven fiberglass material disclosed in the '217 patent with the pair separator of the '866 patent, to arrive at the recitation of claim 38.

Reasons to combine the '866 patent and the '217 patent

The '217 patent discloses materials useful to insulate conductors. The '217 patent demonstrates that one of ordinary skill in the art knew that woven fiberglass tapes could be used as insulating materials. It would have been obvious to one of ordinary skill in the art to use a woven fiberglass tape for the dielectric pair separator disclosed in the '866 patent to achieve the subject matter of claim 38. Further, one of skill in the art would have a reasonable expectation of success of using a woven fiberglass tape in the cable structure of the '866 patent because of the predictable result of combining such basic features. Neither the '683 patent nor the Admitted Prior Art provide any reasons contrary to the combination.

Accordingly, claim 38 is unpatentable under 35 U.S.C. § 103(a) over the '866 patent in view of the '217 patent (and, alternatively in further view of the Admitted Prior Art and/or the '683 patent as applied in connection with claim 34).

Claim 39

Newly-added claim 39 recites **[t]he unshielded twisted pair (UTP) data communications cable as claimed in claim 34, wherein the configurable dielectric pair separator separates the third twisted pair from the fourth twisted pair.** The '866 patent discloses a configurable pair separator “wherein the configurable dielectric pair separator separates the third twisted pair from the fourth twisted pair.” As shown in Figure 3 of the '866 patent, the pair separator also separates the “third twisted pair” (at the “12 o'clock position”) from the “fourth twisted pair” (at the “3 o'clock position”).

According, claim 39 is unpatentable under 35 U.S.C. § 102(b) as anticipated by the ‘866 patent. Alternatively, claim 39 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘683 patent and/or the Admitted Prior Art (as applied in connection with claim 34).

Independent claim 40

Newly-added independent claim 40 recites:

An unshielded twisted pair (UTP) data communications cable consisting of:

four twisted pairs of insulated conductors consisting of a first twisted pair, a second twisted pair, a third twisted pair and a fourth twisted pair;

a configurable dielectric pair separator disposed among the four twisted pairs and arranged to separate the first twisted pair from the second twisted pair along a length of the UTP data communications cable, the configurable dielectric pair separator being substantially flat in a plane of a radial cross-section of the UTP data communications cable and consisting of a nonconductive foamed polymer tape; and

a jacket enclosing the four twisted pairs of insulated conductors and the configurable dielectric pair separator;

wherein the configurable dielectric pair separator and the four twisted pairs of insulated conductors are twisted about a common central axis to form the UTP data communications cable.

Claim 40 includes all of the claim limitations of claim 35, except for the limitation “wherein the configurable dielectric pair separator is arranged within the jacket to form at least two grooves, the first twisted pair being disposed at least partially within a first groove of the at least two grooves and the second twisted pair being disposed at least partially within a second groove of the at least two grooves” (limitation [34e]). As such, claim 40 is unpatentable for the same reasons that claim 35 is unpatentable. That is, claim 40 is unpatentable under 35 U.S.C. § 103(a) over the ‘866 patent in view of the ‘748 patent (and, alternatively in further view of the Admitted Prior Art and/or the ‘683 patent).

The Third Party Requester respectfully requests that, in view of at least the foregoing, that the Examiner finds newly-added claims 34-40 unpatentable over the prior art printed publications of record.

CONCLUSION

The Third Party Requester respectfully requests that the Examiner maintain the rejection of claims 1-33 and further reject claims 34-40 as unpatentable in view of the teachings of the prior art printed publications and requirements of 35 U.S.C. § 112 and deem the arguments advanced by the Patent Owner in the Patent Owner's Response to be erroneous, improper and/or unpersuasive.

Respectfully submitted,

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