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FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

NGUYEN, MINH T

ART UNIT	PAPER NUMBER
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3992

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**Transmittal of Communication to Third Party Requester
Inter Partes Reexamination**

REEXAMINATION CONTROL NUMBER 95/000,476.

PATENT NUMBER 6998537.

TECHNOLOGY CENTER 3999.

ART UNIT 3992.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above-identified reexamination proceeding. 37 CFR 1.903.

Prior to the filing of a Notice of Appeal, each time the patent owner responds to this communication, the third party requester of the *inter partes* reexamination may once file written comments within a period of 30 days from the date of service of the patent owner's response. This 30-day time period is statutory (35 U.S.C. 314(b)(2)), and, as such, it cannot be extended. See also 37 CFR 1.947.

If an *ex parte* reexamination has been merged with the *inter partes* reexamination, no responsive submission by any *ex parte* third party requester is permitted.

All correspondence relating to this *inter partes* reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of the communication enclosed with this transmittal.

PTOL-2070 (Rev.07-04)

ACTION CLOSING PROSECUTION (37 CFR 1.949)	Control No.	Patent Under Reexamination
	95/000,476	6998537
	Examiner	Art Unit
	MINH T. NGUYEN	3992

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --

Responsive to the communication(s) filed by:

Patent Owner on 28 April, 2010

Third Party(ies) on 28 May, 2010

Patent owner may once file a submission under 37 CFR 1.951(a) within 1 month(s) from the mailing date of this Office action. Where a submission is filed, third party requester may file responsive comments under 37 CFR 1.951(b) within 30-days (not extendable- 35 U.S.C. § 314(b)(2)) from the date of service of the initial submission on the requester. **Appeal cannot be taken from this action.** Appeal can only be taken from a Right of Appeal Notice under 37 CFR 1.953.

All correspondence relating to this inter partes reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

PART I. THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892
2. ☒ Information Disclosure Citation, PTO/SB/08
3. ☐ _____

PART II. SUMMARY OF ACTION:

- 1a. ☒ Claims 1-34 are subject to reexamination.
- 1b. ☐ Claims _____ are not subject to reexamination.
2. ☒ Claims 2,3,12-14 and 16 have been canceled.
3. ☒ Claims _____ are confirmed. [Unamended patent claims]
4. ☒ Claims 1,4-11,15,17,18,23-34 are patentable. [Amended or new claims]
5. ☒ Claims 19-22 are rejected.
6. ☐ Claims _____ are objected to.
7. ☐ The drawings filed on _____ ☐ are acceptable ☐ are not acceptable.
8. ☐ The drawing correction request filed on _____ is: ☐ approved. ☐ disapproved.
9. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119 (a)-(d). The certified copy has:
☐ been received. ☐ not been received. ☐ been filed in Application/Control No _____
10. ☐ Other _____

INTER PARTES REEXAMINATION SECOND ACTION CLOSING PROSECUTION

This second Action Closing Prosecution (ACP) is in response to the patent owner's amendment filed on 4/28/10 and requester's comment filed on 5/28/10. In view of the requester's comment, some rejections need to be restored. The following is a detailed office action.

Status of the Claims

Claims 1-22 were subject to reexamination. By the amendment filed 12/23/2009, patent owner amended claim 1, canceled claims 2, 3, 12-14 and 16, and added new claims 23-34. As a result, claims 1, 4-11, 15 and 17-34 are pending in this reexamination application, of which claims 1, 19 and 26 are independent claims.

Prior Art

Claims 1, 4-11, 15 and 17-34 of the United States Patent Number 6,998,537 to Clark et al. ("the '537 patent") are reexamined in view of the following patents and publications:

DE 90 11 484 ("GmbH '484")

DE Patent No. 297 19 866 U1 ("GmbH '866")

U.S. Patent No. 4,385,485 to Yonechi ("Yonechi '485")

JP Patent No. Sho43(1968)-153622470 ("JP '470")

U.S. Patent No. 4,755,629 to Beggs et al. ("Beggs '629")

U.S. Patent No. 5,969,295 ("Boucino '295")

U.S. Patent No. 3,649,744 ("Coleman '744")

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C&M Corp. Eng. Design Guide, 3d edition, pg. 11 (1992) ("C&M")

U.S. Patent No. 4,800,236 ("Lemke '236")

U.S. Patent No. 5,670,748 to Gingue ("Gingue '748")

European Patent Application EP0569217A2 ("Martin '217")

U.S. Patent No. 5,789,711 to Gaeris ("Gaeris '711")

U.S. Patent No. 4,096,346 to Stine ("Stine '346")

U.S. Patent No. 3,622,683 to Roberts et al ("Roberts '683")

Japanese Patent JP Sho56(1981)-7307 ("JP '307")

U.S. Patent No. 3,888,710 to Burk ("Burk '710 ")

James J. Refi, Fiber Optic Cable: A Lightguide, AT&T Specialized Series,
pp. 79- 80 (1991) (the "Refi reference")

U.S. Patent No. 5,486,649 to Gaeris ("Gaeris '649")

U.S. Patent No. 5,010,210 to Sidi et al. ("Sidi '210")

Information Disclosure Statement

The Information Disclosure Statement (IDS) submissions filed on 3/26/10, 4/28/10, 6/28/11 and 8/2/11 have been considered. It is to be noted, however, that where patents, publications, and other such items of information are submitted by a party (patent owner or requester) in compliance with the requirements of the rules, the requisite degree of consideration to be given to such information will be limited by the degree to which the party filing the information citation has explained the content and relevance of the information. In instances, where no explanation of citations (items of information) is required and none is provided for an information citation, only a cursory review of that information is required. The examiner need only perform a cursory evaluation of each unexplained item of information, to the

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extent that he/she needs in order to determine whether he/she will evaluate the item further. If the cursory evaluation reveals the item not to be useful, the examiner may simply stop looking at it. This review may often take the form of considering the documents in the same manner as other documents in Office search files are considered by the Examiner while conducting a search of the prior art in a proper field of search. **The initials of the Examiner, in this proceeding, placed adjacent to the citations on the POL-1449 or PTO/SB/08A and 08B or its equivalent, without an indication in the record to the contrary in the record, do not signify that the information has been considered by the Examiner any further than to the extent noted above.** The same degree of consideration was provided for the references merely cited with the request but for which no explanation regarding the content and relevance of the information was provided. See MPEP 609, seventh paragraph, Revision 5, Aug. 2006 [page 600-141].

The IDSs filed on 3/26/10, 4/28/10, 6/28/11 and 8/2/11 are considered on the attached signed sheets. It is noted that certain items are lined through as not considered: i.e., court documents, Memorandum Opinion or submissions of the prosecution history of related patents are not appropriately cited on an IDS. Items like court documents, Memorandum Opinion or submissions of the prosecution history of related patents are evidence, but are not prior art as such, and therefore will not be placed on the face of the patent; such evidence is therefore inappropriate for an IDS and thus the items are lined through. Only patents and printed publications should be included as citations within an IDS. The examiner notes that the evidence has been read and considered.

Statutes

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Requester's proposed rejections: Grounds 1-4

Ground 1: Requester's proposed obviousness rejection of claims 1-3, 9-12 and 14-18 under 35 USC 103(a) over GmbH '484 in view of Boucino '195 **is not adopted**.

Ground 2: Requester's proposed obviousness rejection of claims 4 and 6-8 under 35 USC 103(a) over GmbH '484 in view of Boucino '295 and further in view of C&M **is not adopted**.

Ground 3: Requester's proposed obviousness rejection of claim 5 under 35 USC 103(a) over GmbH '484 in view of Boucino '295 and further in view of C&M **is not adopted**.

Ground 4: Requester's proposed obviousness rejection of claim 13 under 35 USC 103(a) over GmbH '484 in view of Boucino '295 and further in view of Lemke '246 **is not adopted**.

The proposed rejections were not adopted in the previous ACP office action.

Patent owner and requester do not provide any further argument to rebut the decision for not adopting presented in the previous ACP action. Thus, the decision for not adopting in the previous ACP office action is maintained in this office action.

Requester's proposed rejection: Ground 5

Requester's proposed anticipation rejection of claims 1-3, 11-13, 15-18, 24, 25, 32 and 34 under 35 USC 102(b) by GmbH '866 **is not adopted**.

The proposed rejection was not adopted in the previous ACP office action and the decision for not adopting is maintained in this office action.

Patent owner does not provide any further argument regarding the decision for not adopting. However, in the arguments related to the other rejections, patent owner indicates that the term "flat separator" should be construed as shown in figure 4 of the '537 patent. See patent owner's response on 4/28/10, page 15, last two lines.

In the response filed on 12/23/09, patent owner argued that GmbH '866 does not teach limitations "flat separator", "cabling" and "dielectric separator." Regarding the limitation "flat separator" patent owner argued that shielding foils (item 5) shown in figure 1 of GmbH '866 are wrapped around the conductors, i.e., not substantially flat, whereas claim 1 requires the separator being substantially flat in a radial cross-section taken through the finished cable. Regarding the limitation "cabling" patent owner argued that GmbH '866 merely discloses stranding of the individual conductors to form a twisted pair whereas the claim requires stranding the twisted pairs and the separator about a common axis to form the finished cable. Regarding the limitation "dielectric separator" patent owner argued that the shielding folds of GmbH '866 are not dielectric because in every embodiment it includes a metal foil.

Regarding the limitation "flat separator", requester asserts that the limitation "flat separator" should be read and interpreted in light of the entire specification. Because the specification of the '537 patent identifies figure 5 as a cross-sectional view of the embodiment of figure 4, the shape of the separator shown in figure 5 of the '537 patent should be used to construe the term "substantially flat separator". Comparing the shape of the separator of the

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embodiment disclosed in figures 4 and 5 of the '537 patent to the shape of the separator disclosed in GmbH '866, the shape of the separator disclosed in GmbH '866 meets the claimed language.

The examiner agrees with the requester, the '537 patent clearly identifies figure 5 is a cross-sectional view of the embodiment of figure 4. See '537 patent, col. 3, lines 51-52. As expressly noted by the patent owner, the term "substantially flat" separator should be interpreted as the separator having the shape shown in figure 4. Thus, the shape of the separator shown in figure 5 which is a cross-sectional view of figure 4 should be used to shed light to the term "substantially flat." The figure below shows side by side of the shape of the separator in figure 1 of the separator of GmbH '866 and the shape of the separator in figure 5 of the '537 patent.



Substantially flat separator of DE 297 19 866 (on left) and '537 Patent

Comparing the separator of the embodiment disclosed in figure 5 (above right) which is a cross-sectional view of the embodiment of figure 4 of the '537 patent to the separator disclosed in GmbH '866 (above left), the separator disclosed in GmbH '866 meets the claimed language. Patent owner fails to explain why the cross-sectional view of the shape of the separator shown in figure 5 of the '537 patent (shown above, right) should be seen as "substantially flat" whereas the cross-sectional view of the shape of the separator shown in figure 1 of GmbH '866 (shown above, left) should not be seen as "substantially flat"

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Because a reasonable person with ordinary skill in the art cannot consider those shapes shown above are "substantially flat" the only reasonable interpretation of the term "substantially flat" used in claim 1 must be that the shape is flat when supplied, not in a finished product.

Regarding the limitation "cabling", requester in the response filed on 1/22/10 contended that because GmbH '866 discloses "longitudinal reshaping" GmbH '866 anticipates this limitation. Requester relied on the Declaration of Mr. Baxter at paragraph 11 to support his argument.

In this regard, the examiner agrees with the patent owner that the teaching in GmbH '866 refers to the twisting of each individual conductor pairs, not the twisting of the dielectric separator and the twisted pairs as recited in claim 1. The statement at paragraph 11 in the Declaration of Mr. Baxter is merely his interpretation when reading the GmbH '866 patent, not fact. The examiner respectfully disagrees with his opinion. The phrase "longitude reshaping of the conductor pairs" should be understood as the longitudinal twisting of each individual pair of conductors, not all of the interior components of the cable, as interpreted by Mr. Baxter.

At most, the teachings in GmbH '866 regarding this matter (at page 2, ¶ 2, page 6, ¶ 3 and page 3, claim 11) are unclear and confusing. It can be interpreted in either ways, i.e., as (1) the twisting of each of conductors pairs or (2) the twisting of the dielectric pair separator and the twisted pairs to form a twisted pair cable.

Regarding the limitation "dielectric separator", requester in the response filed on 1/22/10 contended that patent owner improperly narrows the construction of this term. Requester pointed out that claim 24 of the US Patent No. 6,570,095 - a patent in the family of the '537 patent - recites "a dielectric pair separator" with "a dielectric layer and a conductive layer. Id. col. 11, lines 36-37.

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The examiner agrees with the requester. The term "dielectric separator" in claim 1 should not be limited to a separator consists of dielectric. Any separator that does not provide electrical conduction would meet the claimed language. Because GmbH '866 discloses the separator being "aluminum foils laminated by plastic" which does not provide electrical conduction, GmbH '866 anticipates this limitation.

In conclusion, because GmbH '866 does not clearly teach the limitation that the twisted pairs and the dielectric separator are twisted to form a finished cable as required in claim 1, GmbH '866 cannot anticipated claim 1 and its dependent claims.

For the same reasons presented above, the proposed anticipation rejection of claim 26 and its dependent claims is not adopted.

Requester's proposed rejection: Ground 6

Requester's proposed obviousness rejection of claims 1-3, 11-13 and 15-18 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 **is not adopted**.

The proposed rejection was not adopted in the previous ACP office action.

Patent owner and requester do not present any further arguments to rebut the examiner's reasons for not adopting, thus, the decision for not adopting is maintained in this office action.

Requester's proposed rejection: Ground 7

Requester's proposed obviousness rejection of claims 1-3, 11-13, 15-18 and 23, 26, 30 and 31 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Boucino '295 **is not adopted**.

The proposed rejection was not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action.

Patent owner does not provide any further argument regarding the decision for not adopting. Patent owner, in the response filed on 12/23/09 argued that Boucino '295 does not disclose or suggest any reason to helically configure the cable of GmbH '866.

Requester does not provide any further argument. However, in the response filed on 1/22/10, the requester contended that Boucino '295 does provide a suggestion. Requester pointed out that Boucino '295 states that "[f]urthermore, this helical configuration improves the impedance uniformity of the cable by maintaining uniformity of spacing of the respective twisted pairs 16, 18, 20 and 22 despite bending of the cable 10." Boucino '295 at col. 4, lines 18-22.

The examiner agrees with the patent owner's argument that the structures of the shielding foils disclosed in GmbH '866 patent and the spacer disclosed in Boucino '295 are completely different and serve different purposes. The shielding foils in GmbH '866 do not have finned construction and do not purport to maintain the conductors in any fixed relationship with one another. Thus, the suggestion pointed out by the requester that the helical configuration would improve the impedance uniformity of the cable by maintaining uniformity of spacing of the respective twisted pairs taught in Boucino '295 cannot be applied for the cable in GmbH '866 because the separator in GmbH '866 cannot maintain uniformity of spacing of the twisted pairs.

In conclusion, it is not obvious to apply the twisting teaching in Boucino '295 to the cable of GmbH '866. Thus, the proposed obviousness rejection of claim 1 and its dependent claims in this ground is not adopted.

For the same reason presented above, the proposed obviousness rejection of claim 26 and its dependent claims is not adopted.

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Requester's proposed rejection: Grounds 8-11

Ground 8: Requester's proposed obviousness rejection of claims 4, 6-8 and 27-29 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Gingue '748 is not adopted.

Ground 9: Requester's proposed obviousness rejection of claim 5 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Martin '217 is not adopted.

Ground 10: Requester's proposed obviousness rejection of claims 9-10 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Gaeris '711 is not adopted.

Ground 11: Requester's proposed obviousness rejection of claims 9-10 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Burk '710 is not adopted.

The proposed rejections were not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action.

Patent owner and requester do not provide any further arguments in the response to the previous ACP office action. Thus, for the same reasons discussed in ground 5, the proposed obviousness rejections in this section are not adopted in this office action.

Requester's proposed rejection: Ground 12

Requester's proposed obviousness rejection of claims 13-14 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Stine '346 is not adopted.

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The proposed rejection is withdrawn in this office action because claims 13-14 are canceled.

Requester's proposed rejection: Ground 13

Requester's proposed obviousness rejection of claim 18 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 is not adopted.

The proposed rejection was not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action.

Patent owner and requester do not provide any further arguments in the response to the previous ACP office action. Thus, for the same reason discussed in ground 5, the proposed obviousness rejection in this section is not adopted in this office action.

Requester's proposed rejection: Ground 14

Requester's proposed obviousness rejection of claims 19-22 under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Gingue '748 is adopted with modification.

The proposed obviousness rejection of claims 19-22 was withdrawn in the previous ACP office action; however, it is restored in this office action.

Patent owner, at pages 29-32 in the response filed on 12/23/09, argued that the combination of GmbH '866 and Roberts '683 does not teach limitations "flat separator", "separator that consists of non-conductive, dielectric materials". Patent owner argued that GmbH '866 discloses that the purpose of using metal tapes is for electromagnetic shielding. Removing the metal tapes would render the prior art invention being modified unsatisfactory for its intended purpose. Because the modification would change the principle of operation and intended purpose of the metal shield in the cable of GmbH '866, it is not obvious to make the modification as suggested by the requester. Patent owner further argued that combining GmbH '866 with Gingue '748 is improper because Gingue '748 does not disclose any type of separator and provides no indication whatsoever that any of the insulation materials disclosed might be suitable for use in a separator.

Regarding the limitation "substantially flat separator", the examiner agrees with the requester's argument for the reason noted in ground 5 above which is incorporated herein by reference. Regarding the limitation that the separator consists of non-conductive, dielectric materials, the requester points out that Roberts '683 teaches elements 17a shown in figure 13 being made of plastic-only material.

Regarding the argument that removing the metal tapes would render the prior art unsatisfactory for its intended use, the requester asserts that patent owner improperly focuses on the purpose of the foil. The proper focus is on the purpose of the disclosed device – a communications cable. The examiner agrees with the requester. The focus is on the purpose and intended use of the disclosed communications cable. As pointed out by the requester, the objective of GmbH '866 is to have a cable that will operate in the frequency range of 1 to 100MHz. The test data quoted by Mr. Niemiera demonstrates that a separator that is made of only plastic material performs adequately for the disclosed purpose of GmbH '866, a telecommunications cable. Thus, modifying the separator of GmbH '866 by removing the metal part would result in a cable that operates as intended in the telecommunications field.

Regarding the combination of GmbH '866 and Gingue '748, requester asserts that Gingue '748 discloses the benefits of specific materials used in data cables and makes clear that electrical performance considerations are not limited to conductor insulation and extend to other cable applications. The examiner agrees with the requester. A person of ordinary skill in the art would consider the teaching when choosing a material for a separator used in the cable field.

For those above reasons, the rejection which was withdrawn in the previous ACP office action is restored and presented below.

Claims 19-22 are rejected under 35 USC 103(a) over GmbH '866 in view of Roberts '683 and further in view of Gingue '748.

Claim 19:

An unshielded communications cable comprising:

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a plurality of twisted pairs of insulated conductors comprising a first twisted pair of insulated conductors and a second twisted pair of insulated conductors;

GmbH '866 discloses a plurality of twisted pairs, including a first twisted pair and a second twisted pair. Fig. 3 of GmbH shows four twisted pairs. The cable contains four twisted pairs of insulated conductors (item 1). The cable also includes two substantially flat configurable pair separators (item 5). The conductors are insulated. See '866 patent, English trans, at 3 ("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.").

a substantially flat configurable dielectric separator that consists of non-conductive, dielectric materials disposed between the plurality of twisted pairs of conductors that separates the first twisted pair of insulated conductors from the second twisted pair of insulated conductors; and

Fig. 3 of GmbH '866 patent discloses a data transmission cable that includes a substantially flat, configurable separator that divides the cable interior into at least two sectors, separating one twisted pair from another twisted pair. GmbH '866 further discloses that the pair separator may be made of a metal foil, such as aluminum, or a metal foil laminated by plastic, the second configuration indicates that the separator is dielectric." See GmbH '866, English trans. at 5 ("The shielding 5 or the partial shielding 11, 12 preferably consists of metal foils, especially aluminum foils or aluminum foils laminated by plastic.")

GmbH '866 does not disclose that the separator consists of non-conductive, dielectric materials.

It would have been obvious to one of ordinary skill in the art to modify the separator of the cable of GmbH '866 to consist of a dielectric layer only.

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First, one of ordinary skill in the art would be under market pressure to reduce costs for the cable and eliminating the metal foil would likely reduce the cost of the cable. 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."). See also, GmbH '866 patent, Engl. trans, at 1 (discussing the expense of prior art cables).

Second, as illustrated in Roberts '683, there are only a finite number of combinations of plastic and metal components for separators. Roberts '683 shows four of the six possible combinations in figures 5-8 - the other two being a plastic material sandwiched in metal and an all plastic material separator. Figure 13 of Roberts '683 shows separator 17a being made of plastic only, i.e., "plastic tape".

It would have been obvious for one of ordinary skill in the art to try all six of these configurations, including an all plastic separator (that is, a dielectric pair separator that "consist[s] of a dielectric layer.")

A person with ordinary skill in the art would have been motivated to do so to reduce the cost of the cable. One of ordinary skill in the art would have a reasonable expectation of success of using a different separator configuration of the cable structure of GmbH '866 based on the teachings of Roberts '683, because of the substantial overlap of technology and the predictable result achieved by combining the relevant teachings. In fact, the modified cable would still be capable of operating in the frequency range of 1 to 100Mhz as the unmodified cable. See the test submitted in the Declaration of Mr. Niemiera at paragraph 7.

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

GmbH '866 discloses a cable with the twisted pairs and separator within a protective sheath (item 4 in Fig. 3). See also GmbH '866, English 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."). The cable cover of the '866 patent encloses the twisted pairs and dielectric pair separator.

wherein the substantially flat configurable dielectric separator includes a foamed polymer.

GmbH does not disclose the separator includes a foamed polymer.

Gingue '748 discloses fluorinated ethylene propylene (FEP) polymer (among other materials) for use in data cables to achieve flame retardancy and minimize smoke. These materials are dielectrics and are non-conductive, as they are used as insulators for copper conductors. Gingue '748 is directly related to materials used for flame retardancy and smoke suppression in data communications cables. See *generally*, Gingue '748. Gingue '748 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 material is preferably employed to achieve a favorable balance of electrical properties and flame retardancy." See Gingue '748 patent, Table 1 and col. 3, 11. 11-25. Although Gingue '748 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 known to combine the teaching of foamed polymer disclosed in Gingue '748 to modify the pair separator of GmbH '866, to achieve a pair separator with non-conductive, dielectric materials only, where the materials include a foamed polymer.

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Claim 20:

The communications cable as claimed in claim 19, wherein the substantially flat configurable dielectric separator includes a flame-retardant, low-dielectric constant, foamed polymer tape.

GmbH '866 does not disclose the dielectric pair separator being made of a flame-retardant, low-dielectric constant, foamed polymer tape as called for in the claim. Gingue '748 discloses fluorinated ethylene propylene (FEP) polymer (among other materials) for use in data cables to achieve flame retardancy and minimize smoke. Gingue '748 is directly related to materials used for flame retardancy and smoke suppression in data communications cables. Thus, It would have been obvious to combine for the reason and motivation discussed in claim 19.

Claim 21:

The communications cable as claimed in claim 19, wherein the substantially flat configurable dielectric separator includes a foamed fluorinated ethylene propylene material.

GmbH does not disclose the dielectric pair separator is a foamed fluorinated ethylene propylene material as called for in the claim. However, using such material for the dielectric pair separator of GmbH '866 is obvious in view of Gingue '748 for the same reason and motivation discussed in claim 20.

Claim 22:

The communications cable as claimed in claim 19, wherein the substantially flat configurable dielectric separator is a flame-retardant, foamed polymer tape.

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GmbH '866 does not disclose the dielectric pair separator is a flame-retardant, foamed polymer tape as called for in each the claim. However, using such material for the dielectric pair separator of GmbH '866 is obvious in view of Gingue for the same reason and motivation discussed in claim 20.

Requester's proposed rejection: Ground 15

Requester's proposed obviousness rejection of claims 1-3, 9, 12, 15, 17-18, 23, 26 and 30-31 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference is not adopted.

The proposed rejection of claims 2-3 and 12 was withdrawn because they were canceled.

The proposed rejection of claims 1, 9, 15 and 17-18 was adopted in the previous ACP office action and the examiner's decision for adopting is withdrawn in this office action.

Patent owner argues that the combination does not teach "a plurality of twisted pairs", "substantial flat separator" and "spacing sufficient to provide crosstalk isolation".

Regarding the limitation "a plurality of twisted pairs", requester contends that US Patent No. 4,595,793 cited in the '537 patent is evidence that those skilled in the art would know to replace fiber cables by twisted pairs. The Refi reference also teaches copper pairs being substituted for optical fibers in communications cable.

The examiner agrees with the patent owner's argument that it is not obvious to combine Yonechi '485 and the Refi reference to obtain the cable recited in claim 1. Yonechi '485 teaches methods and apparatus for fabricating optical fiber cables. The apparatus shown in figure 8 of Yonechi '485 is only suited for manufacturing fiber cables. It is unlikely that a person with ordinary skill in the art would look at the teaching of a hybrid cable containing a twisted pair and fibers in the Refi reference to modify the apparatus taught Yonechi '485 to make cable with twisted pairs. Further, the apparatus in Yonechi '485 is intended for making fiber cables, modifying the apparatus to make cable having the structure recited in claim 1 would render the modified apparatus unsatisfactory for its intended purpose which is to manufacture fiber cables.

Other arguments are moot because the rejections are withdrawn.

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For the above reason, the proposed rejection of claim 1 and its dependent claims is withdrawn.

For the same reason discussed above, the proposed rejection of claim 26 and its dependent is also withdrawn.

Requester's proposed rejection: Grounds 16-20

Ground 16: Requester's proposed obviousness rejection of claims 4, 6-8 and 27-29 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference and further in view of Gingue '748 **is not adopted**.

Ground 17: Requester's proposed obviousness rejection of claim 5 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference and further in view of Martin '217 **is not adopted**.

Ground 18: Requester's proposed obviousness rejection of claim 10 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference and further in view of Gaeris '711 **is not adopted**.

Ground 19: Requester's proposed obviousness rejection of claim 10 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference and further in view of Burk '710 **is not adopted**.

Ground 20: Requester's proposed obviousness rejection of claim 11 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference and further in view of Gaeris '649 **is not adopted**.

The above proposed rejections were adopted in the previous ACP office action and the examiner's decision for adopting is withdrawn in this office action.

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The proposed rejections of these claims are withdrawn because these claims depend from claim 1 or claim 26 where the proposed rejection is withdrawn as discussed in ground 15.

Requester's proposed rejection: Ground 21

Requester's proposed obviousness rejection of claims 13-14 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference and further in view of Stine '346 is not adopted.

The proposed rejection of claims 13-14 is withdrawn because they are canceled.

Requester's proposed rejection: Ground 22

Requester's proposed obviousness rejection of claims 19-22 under 35 USC 103(a) over Yonechi '485 in view of the Refi reference and further in view of Gingue '748 is not adopted.

The proposed rejection was adopted in the previous ACP office action and the examiner's decision for adopting is withdrawn in this office action for the same reasons discussed in ground 15 which are incorporated herein by reference.

Requester's proposed rejection: Ground 23

Requester's proposed anticipation rejection of claims 1-2, 23, 25 and 32 under 35 USC 102(b) by JP '470 **is not adopted**.

The rejection of claim 2 was withdrawn in the previous office action because the claim is canceled. The rejection of claims 1, 23, 25 and 32 is withdrawn in this office action.

Patent owner argues that JP '470 does not teach "configurable separator" because JP '470 states that the plate body 2 is rigid.

Requester contends that telecommunications cable must have some degree of flexibility to enable the cable to be installed.

The examiner agrees with the patent owner that because JP '470 discloses that the plate body is rigid, the plate body in the cable of JP '470 cannot anticipate the limitation "configurable separator".

Requester's proposed rejection: Grounds 24-26

Ground 24: Requester's proposed obviousness rejection of claims 4 and 6-8 under 35 USC 103(a) over JP '470 in view of Gingue '748 **is not adopted**.

Ground 25: Requester's proposed obviousness rejection of claim 5 under 35 USC 103(a) over JP '470 in view of Martin '217 **is not adopted**.

Ground 26: Requester's proposed obviousness rejection of claim 11 under 35 USC 103(a) over JP '470 **is not adopted**.

The above proposed rejections were adopted in the previous ACP office action and the examiner's decision for adopting is withdrawn in this office action.

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The proposed rejections of these claims are withdrawn because these claims depend from claim 1 or claim 26 where the rejection are withdrawn as discussed in ground 23.

Requester's proposed rejection: Ground 27

Requester's proposed obviousness rejection of claims 19-22 under 35 USC 103(a) over JP '470 in view of Gingue '748 **is not adopted**.

The rejection of claims 19-22 is withdrawn in this office action.

Patent owner argues that JP '470 does not teach "configurable separator" because JP '470 states that the plate body is rigid and the proposed combination is improper.

Requester contends that telecommunications cable must have some degree of flexibility to enable the cable to be installed and the combination is proper.

The examiner agrees with the patent owner that because JP '470 discloses that the plate body is rigid, the plate body in the cable of JP '470 cannot anticipate the limitation "configurable separator".

Requester's proposed rejection: Ground 28

Requester's proposed anticipation rejection of claim 19 under 35 USC 102(b) by Beggs '629 **is not adopted**.

The proposed rejection was adopted in the previous ACP office action and the examiner's decision for adopting is withdrawn in this office action.

Patent owner argues that Beggs '629 does not teach "substantial flat separator" and "foamed polymer" separator. Regarding the argument that Beggs does not teach "a foamed polymer", patent owner argues that Beggs '629 discloses members 51 in figure 5 may comprise "an expanded polyvinyl chloride plastic material," the perform comprising joined dual tubular members 51 may comprise "solid or expanded polyvinyl chloride plastic material", and the S-shaped perform 58 may be replaced with a tape made of a dielectric material. However, Beggs '629 does not disclose preform 58 is made of an expanded polyvinyl chloride plastic material.

The examiner agrees with the patent owner. For anticipation, the reference must teach each and every element recited in the claim. Because Beggs '629 does not teach separator 58 being made of foamed polymer, Beggs '629 cannot anticipate claim 19. Thus, the requester's proposed anticipation rejection of claim 19 by Beggs '629 is withdrawn in this office action.

Requester's proposed rejection: Ground 29

Requester's proposed obviousness rejection of claims 1-3, 11-13, 15-17, 23-24, 26, 30 and 31 under 35 USC 103(a) over Beggs '629 in view of Yonechi '485 **is not adopted**.

The proposed rejection was not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action for the reason that it is not obvious to twist the twisted pairs and the separator of the cable disclosed in Beggs '629 in view

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of the teaching in Yonechi '485 to obtain the cable recited in the claims. Patent owner and requester do not provide any further argument in the responses to the previous ACP office action to rebut the reason for not adopting presented in the previous ACP office action.

Requester's proposed rejection: Grounds 30-32

Ground 30: Requester's proposed obviousness rejection of claims 4, 6-8 under 35 USC 103(a) over Beggs '629 in view of Yonechi '485 and further in view of Gingue '748 is not adopted.

Ground 31: Requester's proposed obviousness rejection of claims 9-10 under 35 USC 103(a) over Beggs '629 in view of Yonechi '485 and further in view of Gaeris '711 is not adopted.

Ground 32: Requester's proposed obviousness rejection of claims 9-10 under 35 USC 103(a) over Beggs '629 in view of Yonechi '485 and further in view of Burk '710 is not adopted.

The proposed rejections were not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action.

Patent owner and requester do not provide any further argument in the responses to the previous ACP office action.

Because these claims depend from claim 1 which is not adopted, the proposed obviousness rejections of these claims are not adopted.

Requester's proposed rejection: Ground 33

Requester's proposed obviousness rejection of claim 14 under 35 USC 103(a) over Beggs '629 in view of Yonechi '485 and further in view of Stine '346 is not adopted.

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The proposed rejection was not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action because claim 14 is canceled.

Requester's proposed rejection: Grounds 34-35

Ground 34: Requester's proposed obviousness rejection of claim 18 under 35 USC 103(a) over Beggs '629 in view of Yonechi '485 and further in view of GmbH '484 is not adopted.

Ground 35: Requester's proposed obviousness rejection of claims 20-22 under 35 USC 103(a) over Beggs '629 in view of Gingue '748 is not adopted.

The proposed rejections were not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action.

Patent owner and requester do not provide any further argument in the responses to the previous ACP office action.

Because these claims depend from claim 1 or claim 19 which were not adopted, the obviousness rejections of these claims are not adopted.

Requester's proposed rejection: Ground 36

Requester's proposed anticipation rejection of claims 1, 3, 12 and 15 under 35 USC 102(b) by JP '307 is not adopted.

The proposed rejection was not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action.

Patent owner and requester do not provide any further argument in the responses to the previous ACP office action.

The proposed rejection is not adopted for the reason that JP '307 does not teach twisted pairs and configurable separator as argued by the patent owner.

Requester's proposed rejection: Grounds 37-38

Ground 37: Requester's proposed obviousness rejection of claims 4, 7, 19 and 21 under 35 USC 103(a) over JP '307 in view of Gingue '748 is not adopted.

Ground 38: Requester's proposed obviousness rejection of claims 9-10 under 35 USC 103(a) over JP '307 in view of Burk '710 is not adopted.

The proposed rejections were not adopted in the previous ACP office action and the examiner's decision for not adopting is maintained in this office action.

Patent owner and requester do not provide any further argument in the responses to the previous ACP office action.

Regarding claim 19, the proposed rejection is not adopted for the same reason noted in ground 36 which is incorporated herein by reference.

Regarding claims 4, 7, 21, because these claims depend from claim 1 or claim 19 which was not adopted, the proposed obviousness rejections of these claims are not adopted.

Requester's proposed rejection: Ground 39

Requester's proposed obviousness rejection of claim 33 under 35 USC 103(a) over GmbH '866 in view of Sidi '210 is not adopted.

Because claim 33 depends from claim 25 which depends from claim 1 which is not adopted as discussed in ground 5, the proposed rejection of claim 33 is not adopted.

Requester's proposed rejection: Grounds 40-41

Ground 40: Requester's proposed obviousness rejection of claims 24 and 34 under 35 USC 103(a) over JP '470 in view of GmbH '866 is not adopted.

Ground 41: Requester's proposed obviousness rejection of claim 33 under 35 USC 103(a) over JP '470 in view of Sidi '210 is not adopted.

The rejections of claims 24, 33 and 34 were adopted in the previous ACP office action; however, they are withdrawn in this office action because claims 24, 33 and 34 depend from claim 1 which is not adopted for the reason discussed in ground 23.

Requester's proposed rejection: Ground 42

Requester's proposed indefiniteness rejection of claims 1, 4-11, 15, 17-18, 23-25 and 32-34 as these new claims introduce new matter is not adopted.

At pages 50-51 of the response filed on 1/22/10, Requester alleged that:

- (1) the embodiments shown in Figs. 4-5 of the '537 patent under reexamination do not show a separator which is substantially flat in a radial cross-section.
- (2) the embodiments shown in Figs. 4-5 of the '537 patent under reexamination show only two twisted pairs and nowhere does the '537 patent suggest that the embodiments of Figs. 4-5 can have more than 2 twisted pairs whereas claim 26 requires four and only four twisted pairs.

Examiner believes that patent owner makes typo-mistake when indicating that Fig. 4 of the '537 patent supports the subject matter recited in claims 1 and 26 (Patent owner's response, Appendix A). While it is true that Figs. 4-5 show only two twisted pairs and the separator is not flat in a radial cross-section as pointed out by the requester, at least Fig. 6 of the '537 discloses an embodiment having four twisted pairs. Also, the original claim 1 which is part of the specification recites "comprising: a plurality of twisted pairs, i.e., can be more than two twisted pairs. Thus, amended claim 1 and new claims do not introduce new matter.

Secondary Considerations

Patent owner's arguments regarding "secondary considerations" at pages 12-14 in the response filed on 12/23/09 is incorporated herein by reference.

Requester's response at pages 32-36 in the response filed on 1/22/10 is incorporated herein by reference.

For the same reasons provided by the Requester, the arguments regarding "long-felt need", "commercial success" and "copy by others" are not found persuasive because they do not satisfy the Office's standard as evidence of secondary considerations.

Patent owner and requester do not provide any further arguments in the responses to the previous ACP office action.

Conclusion

This is an **ACTION CLOSING PROSECUTION (ACP)**; see MPEP § 2671.02.

(1) Pursuant to 37 CFR 1.951(a), the patent owner may once file written comments limited to the issues raised in the reexamination proceeding and/or present a proposed amendment to the claims which amendment will be subject to the criteria of 37 CFR 1.116 as to whether it shall be entered and considered. Such comments and/or proposed amendments must be filed within a time period of 30 days or one month (whichever is longer) from the mailing date of this action. Where the patent owner files such comments and/or a proposed amendment, the third party requester may once file comments under 37 CFR 1.951(b) responding to the patent owner's submission within 30 days from the date of service of the patent owner's submission on the third party requester.

(2) If the patent owner does not timely file comments and/or a proposed amendment pursuant to 37 CFR 1.951(a), then the third party requester is precluded from filing comments under 37 CFR 1.951(b).

(3) Appeal cannot be taken from this action, since it is not a final Office action.

Service of Papers

After the filing of a request for reexamination by a third party requester, any document filed by either the patent owner or the third party requester must be served on the other party (or parties where two or more third party requester proceedings are merged) in the reexamination proceeding in the manner provided in 37 CFR 1.248. See 37 CFR 1.550(f).

Extensions of Time

Extensions of time under 37 CFR 1.136(a) will not be permitted in *inter partes* reexamination proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 314(c) requires that inter partes reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.937). Patent owner extensions of time in inter partes reexamination proceedings are provided for in 37 CFR 1.956. Extensions of time are not available for third party requester comments, because a comment period of 30 days from service of patent owner's response is set by statute. 35 U.S.C. 314(b)(3). Time periods may be extended only upon a strong showing of sufficient cause.

Notification of Concurrent Proceedings

The patent owner is reminded of the continuing responsibility under 37 CFR 1.985(a), to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the '537 patent throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP 2686 and 2686.04.

Correspondence

All correspondence relating to this *inter partes* reexamination proceeding should be directed as follows:

By U.S. Postal Service Mail to:

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

By FAX to:

571-273-9900
Central Reexamination Unit

By Hand to:

Customer Service Window
Randolph Building
401 Dulany St.
Alexandria, VA 22314

Registered users of EFS-Web may alternatively submit such correspondence via the electronic filing system EFS-Web, at <https://sportal.uspto.gov/authenticate/authenticateuserlocalepf.html>.

EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are "soft scanned" (i.e., electronically uploaded) directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submissions after the "soft scanning" process is complete.

NOTICE RE PATENT OWNER'S CORRESPONDENCE ADDRESS

Effective May 16, 2007, 37 CFR 1.33(c) has been revised to provide that:

The patent owner's correspondence address for all communications in an *ex parte* reexamination or an *inter partes* reexamination is designated as the correspondence address of the patent.

Revisions and Technical Corrections Affecting Requirements for Ex Parte and Inter Partes Reexamination, 72 FR 18892 (April 16, 2007)(Final Rule)

The correspondence address for any pending reexamination proceeding not having the same correspondence address as that of the patent is, by way of this revision to 37 CFR 1.33(c), automatically changed to that of the patent file as of the effective date.

This change is effective for any reexamination proceeding which is pending before the Office as of May 16, 2007, including the present reexamination proceeding, and to any reexamination proceeding which is filed after that date.

Parties are to take this change into account when filing papers, and direct communications accordingly.

In the event the patent owner's correspondence address listed in the papers (record) for the present proceeding is different from the correspondence address of the patent, it is strongly encouraged that the patent owner affirmatively file a Notification of Change of Correspondence Address in the reexamination proceeding and/or the patent (depending on which address patent owner desires), to conform the address of the proceeding with that of the patent and to clarify the record as to which address should be used for correspondence.

Telephone Numbers for reexamination inquiries:

Reexamination Practice	(571) 272-7703
Central Reexam Unit (CRU)	(571) 272-7705
Reexamination Facsimile Transmission No.	(571) 273-9900

Any inquiry concerning this communication or earlier communication from the examiner, or as to the status of the proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

Conferee # 1

HNT

Conferee # 2

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