

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 11,740,423 B2
APPLICATION NO. : 18/105639
DATED : August 29, 2023
INVENTOR(S) : Vincent Pilon

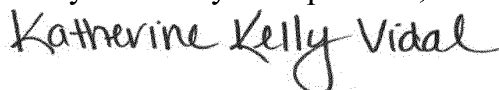
Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims

At Column 12, Line 48, Claim 9, please change "2" to --2 W--.
At Column 12, Line 61, Claim 9, please change "2" to --2 W--.
At Column 12, Line 64, Claim 9, please change "2" to --2 W--.
At Column 12, Line 66, Claim 9, please change "2" to --2 W--.
At Column 13, Line 26, Claim 9, please change "2" to --2 W--.
At Column 13, Line 29, Claim 9, please change "2" to --2 W--.
At Column 13, Line 31, Claim 9, please change "2" to --2 W--.
At Column 13, Line 35, Claim 9, please change "2" to --2 W--.
At Column 13, Line 39, Claim 9, please change "2" to --2 W--.
At Column 13, Line 47, Claim 9, please change "2" to --2 W--.
At Column 13, Line 59, Claim 11, please change "2" to --2 W--.
At Column 14, Line 38, Claim 17, please change "2" to --2 W--.
At Column 14, Line 51, Claim 17, please change "2" to --2 W--.
At Column 14, Line 54, Claim 17, please change "2" to --2 W--.
At Column 14, Line 56, Claim 17, please change "2" to --2 W--.
At Column 15, Line 17, Claim 17, please change "2" to --2 W--.
At Column 15, Line 28, Claim 19, please change "2" to --2 W--.

Signed and Sealed this
Twenty-sixth Day of September, 2023



Katherine Kelly Vidal
Director of the United States Patent and Trademark Office



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM

CONFIRMATION NO. 6284

194532
MH2 - Belden Canada
1951 Kidwell Drive
Suite 310
Tysons Corner, VA 22182

POA ACCEPTANCE LETTER



OC000000061508836

Date Mailed: 09/07/2023

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/30/2023.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/dmbaines/



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18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM

CONFIRMATION NO. 6284

25545
Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QC H3B 4M4
CANADA

POWER OF ATTORNEY NOTICE



OC000000061508727

Date Mailed: 09/07/2023

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/30/2023.

- The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/dmbaines/



ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
18/105,639

RECEIPT DATE / TIME
08/30/2023 09:39:51 PM ET

ATTORNEY DOCKET #
G13569-00532-HM

Title of Invention

TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # 11740423

CONFIRMATION # 6284

FILED BY Karl Hicks

PATENT CENTER # 62711654

FILING DATE 02/03/2023

CUSTOMER # 25545

FIRST NAMED INVENTOR VINCENT PILON

CORRESPONDENCE ADDRESS -

AUTHORIZED BY Jay Stelacone

Documents

TOTAL DOCUMENTS: 3

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
Request_for_COC.pdf	1	Request for Certificate of Correction	18 KB
Certificate of Correction.pdf	2	Request for Certificate of Correction	182 KB
POA.pdf	1	Power of Attorney	22 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
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Request_for_COC.pdf	74D20C198FF19FE5B28D1E19470CF04320D2F2C3E770C824A C84750631867060150FDBC49328D1E43450A7CA56801DC61D E14E121605E1FF89D210C45FF23215
Certificate of Correction.pdf	28EDB528AE65FDEBC2A249FEB08C76225B0985EB390703C39 0304C517A0A6CD3615222AA9B4288A074670397D0D57637D65 B5A399087BF7BED92115005691F8D
POA.pdf	B0BDA5B8F7690E9EC631061326C60C14CF5E2FCCBD9D7187 0BDA7F082961F9214FC26FF7A16515EF023B96B26FA5185966 A0AE44D23E8397E5CF14FE65280558

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of
Vincent Pilon

Group Art Unit: 2874

U.S. Patent No.: 11,740,423

Examiner: Rhonda S. Peace

Filed: February 3, 2023

Docket No.: 0404.0016-CON3 (As
Amended)

For: TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN
A FIBER OPTIC MANAGEMENT SYSTEM

REQUEST FOR CERTIFICATE OF CORRECTION
UNDER 35 U.S.C. § 255 AND 37 C.F.R. § 1.323

ATTN: CERTIFICATE OF CORRECTION BRANCH

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Applicant respectfully requests that the U.S. Patent and Trademark Office ("USPTO") issue a Certificate of Correction in the referenced patent and submits herewith an accompanying Certificate of Correction form to correct typographical errors in the claims of U.S. Patent No. 11,740,423. Additionally, attached is a Power of Attorney by the Applicant which transfers responsibility of this patent to Customer No. 194532.

Applicant believes that the typographical errors are on the part of the USPTO and does not submit a fee herewith. If any additional fees are required, please charge to our deposit account no. 50-2961.

Respectfully submitted,

Date: August 30, 2023

/jay a. stelacone/

Jay A. Stelacone
Reg. No. 42,168

MH2 TECHNOLOGY LAW GROUP LLP
Tysons Corner, VA 22182
Phone: (703) 917-0000 x 120
Facsimile: (703) 997-4905

Attachments:

Certificate of Correction Form
Power of Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

GENERAL POWER OF ATTORNEY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Owner Name: BELDEN CANADA ULC

hereby appoints the patent practitioners associated with Customer No. 194532 as attorneys of record to prosecute any and all patents and patent applications in which this General Power of Attorney is filed, and all continuations and divisions thereof, owned in whole or in part by the above-named owner, and to transact all business in the Patent and Trademark Office.

The undersigned is authorized to execute this document as or on behalf of the owner.

**ALL CORRESPONDENCE SHOULD BE SENT TO MH2 TECHNOLOGY LAW
GROUP LLP, CUSTOMER NO. 39878, TELEPHONE (703) 917-0000.**

8/3/2023
Date

Signature
Typed Name: Christopher W. Day
Title: VP Ad Canada Chief IP Counsel

Christopher W. Day

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 11,740,423

APPLICATION NO.: 18/105,639

ISSUE DATE : August 29, 2023

INVENTOR(S) : Vincent Pilon

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At column 12, line 48, claim 9, please change "2" to --2 W--.
At column 12, line 61, claim 9, please change "2" to --2 W--.
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At column 15, line 28, claim 19, please change "2" to --2 W--.

MAILING ADDRESS OF SENDER (Please do not use Customer Number below):

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM	6284
25545	7590	08/29/2023	EXAMINER	
Lavery, De Billy, LLP 1 Place Ville Marie, Suite 4000 Montreal, QUEBEC H3B 4M4 CANADA			PEACE, RHONDA S	
			ART UNIT	PAPER NUMBER
			2874	
			NOTIFICATION DATE	DELIVERY MODE
			08/29/2023	ELECTRONIC

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.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@lavery.ca



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.
18/105,639	29-Aug-2023	11740423

Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QC H3B 4M4
CANADA

EGRANT NOTIFICATION

Your electronic patent grant (eGrant) is now available, which can be accessed via Patent Center at <https://patentcenter.uspto.gov>

The electronic patent grant is the official patent grant under 35 U.S.C. 153. For more information, please visit <https://www.uspto.gov/electronicgrants>



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United States Patent and Trademark Office
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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/105,639	08/29/2023	11740423	G13569-00532-HM	6284

25545 7590 08/09/2023
Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QUEBEC H3B 4M4
CANADA

ISSUE NOTIFICATION

The projected patent number and issue date are specified above. The patent will issue electronically. The electronically issued patent is the official patent grant pursuant to 35 U.S.C. § 153. The patent may be accessed on or after the issue date through Patent Center at <https://patentcenter.uspto.gov/>. The patent will be available in both the public and the private sides of Patent Center. Further assistance in electronically accessing the patent, or about Patent Center, is available by calling the Patent Electronic Business Center at 1-888-217-9197.

The USPTO is implementing electronic patent issuance with a transition period, during which period the USPTO will mail a ceremonial paper copy of the electronic patent grant to the correspondence address of record. Additional copies of the patent (i.e., certified and presentation copies) may be ordered for a fee from the USPTO's Certified Copy Center at <https://certifiedcopycenter.uspto.gov/index.html>. The Certified Copy Center may be reached at (800)972-6382.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 5 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Center (<https://patentcenter.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

INVENTOR(s) (Please see PATENT CENTER site <https://patentcenter.uspto.gov> for additional inventors):

VINCENT PILON, LACHINE, CANADA;

APPLICANT(s) (Please see PATENT CENTER site <https://patentcenter.uspto.gov> for additional applicants):

BELDEN CANADA ULC, SAINT-LAURENT, CANADA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.



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18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM

CONFIRMATION NO. 6284

25545

Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QC H3B 4M4
CANADA

PUBLICATION NOTICE



OC000000138078534

Date Mailed: 06/15/2023

Title: TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

Publication No. US-2023-0185046-A1

Publication Date: 06/15/2023

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to the applicant. A copy of the publication may be obtained from the Office upon payment of the application fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571)272-3150 or (800)972-6382, by facsimile at (571)273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic business center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <https://portal.uspto.gov/pair/> PublicPair. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000 or (571) 272-4200 or 1-888-786-0101

"FEE ADDRESS" INDICATION FORM**Address to:**

**Mail Stop Maintenance Fee
Director of the United States
Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450**

-OR-**Fax to:****571-273-6500**

INSTRUCTIONS: The issue fee must have been paid for the application(s) listed on this form. In addition, only an address represented by a Customer Number can be established as the fee address for maintenance fee purposes (hereafter, fee address). A fee address should be established when correspondence related to maintenance fees should be mailed to a different address than the correspondence address for the application.

When to check the first box below: If you have a Customer Number to represent the fee address.

When to check the second box below: If you have no Customer Number representing the desired fee address, in which case a completed Request for Customer Number (PTO/SB/125) must be attached to this form. For more information on Customer Numbers, see the Manual of Patent Examining Procedure (MPEP) § 403.

For the following listed application(s), please recognize as the "Fee Address" under the provisions of 37 CFR 1.363 the address associated with:

Customer Number: **25545****OR**

The attached Request for Customer Number form (PTO/SB/125)

PATENT NUMBER
(if known)

APPLICATION NUMBER

18/105,639

Completed by (check one):



Applicant/Inventor

/Hugh Mansfield Reg.# 55757/

Signature

Attorney or Agent of record 55757Hugh Mansfield

Typed or printed name



Assignee of record of the entire interest. See
37 CFR 3.71. Statement under 37 CFR 3.73(c)
(Form PTO/AIA/96) is enclosed or was filed on

514 397 5170

Requester's telephone number

(Date)

24 Apr 2023

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. If the assignee is a juristic entity, this form must be signed by a patent practitioner (attorney or agent) of record. Submit multiple forms if more than one signature is required, see below*.



*Total of _____ forms are submitted

This collection of information is required by 37 CFR 1.363. The information is required to obtain or retain a benefit by the public, which is to indicate (and for the USPTO to process) a fee address. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 5 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND COMPLETED FORMS TO THE PREVIOUS ADDRESS. **SEND COMPLETED FORMS TO: Mail Stop Maintenance Fee, Director of the United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

25545 7590 04/10/2023

Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QUEBEC H3B 4M4
CANADA

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM	6284

TITLE OF INVENTION: TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1200	\$0.00	\$0.00	\$1200	07/10/2023

EXAMINER	ART UNIT	CLASS-SUBCLASS
PEACE, RHONDA S	2874	385-135000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☒ Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Lavery, de Billy LLP

2 Hugh Mansfield

3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required)

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☒ Electronic Payment via Patent Center or EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /HUGH MANSFIELD Reg.#55757/

Date 24 Apr 2023

Typed or printed name Hugh Mansfield

Registration No. 55757



UNITED STATES
PATENT AND TRADEMARK OFFICE

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
18/105,639

RECEIPT DATE / TIME
04/24/2023 05:18:19 PM ET

ATTORNEY DOCKET #
G13569-00532-HM

Title of Invention

TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # -

CONFIRMATION # 6284

FILED BY Hugh Mansfield

PATENT CENTER # 61974426

FILING DATE 02/03/2023

CUSTOMER # 25545

FIRST NAMED INVENTOR VINCENT PILON

CORRESPONDENCE ADDRESS -

AUTHORIZED BY -

Documents

TOTAL DOCUMENTS: 2

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
2501-USPTO-SB-47-004.pdf	2	Maintenance Fee Address Change	231 KB
2501-USPTO-13569_532_Notice_of_Allowance_Due_Signed.pdf	1	Issue Fee Payment (PTO-85B)	254 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
2501-USPTO-SB-47-004.pdf	1719DB7C7B9493E807EB243EFA0658F9A3880E61830FE66795

3CEE08DE3CBDD4660639E7F25C5AFB9E95EDF1F498720F251
254771C428BAC7AE3E435E9408564

2501-USPTO- AE39152739B4706C2F2F7B0826D5F5F8D853E793436A43EC62
13569_532_Notice_of_Allowanc F59A471379D6563B878273EF18B21968640F3452473E0A45CC7
e_Due_Signed.pdf 8F3C729F501D7146683A33FD4C3

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



**UNITED STATES
PATENT AND TRADEMARK OFFICE**

P.O. Box 1450
Alexandria, VA 22313 - 1450
www.uspto.gov

ELECTRONIC PAYMENT RECEIPT

APPLICATION #
18/105,639

RECEIPT DATE / TIME
04/24/2023 05:18:19 PM ET

ATTORNEY DOCKET #
G13569-00532-HM

Title of Invention

TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # -

CONFIRMATION # 6284

FILED BY Hugh Mansfield

PATENT CENTER # 61974426

AUTHORIZED BY -

CUSTOMER # 25545

FILING DATE 02/03/2023

CORRESPONDENCE
ADDRESS -

FIRST NAMED
INVENTOR VINCENT PILON

Payment Information

PAYMENT METHOD
CARD / 1007

PAYMENT TRANSACTION ID
E20234NH18579638

PAYMENT AUTHORIZED BY
Hugh Mansfield

FEE CODE	DESCRIPTION	ITEM PRICE(\$)	QUANTITY	ITEM TOTAL(\$)
1501	UTILITY ISSUE FEE	1200.00	1	1200.00
TOTAL AMOUNT:				\$1,200.00

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

25545 7590 04/10/2023
Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QUEBEC H3B 4M4
CANADA

EXAMINER

PEACE, RHONDA S

ART UNIT PAPER NUMBER

2874

DATE MAILED: 04/10/2023

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM	6284

TITLE OF INVENTION: TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1200	\$0.00	\$0.00	\$1200	07/10/2023

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 40% the amount of undiscounted fees, and micro entity fees are 20% the amount of undiscounted fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

25545 7590 04/10/2023

Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QUEBEC H3B 4M4
CANADA

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM	6284

TITLE OF INVENTION: TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1200	\$0.00	\$0.00	\$1200	07/10/2023

EXAMINER	ART UNIT	CLASS-SUBCLASS
PEACE, RHONDA S	2874	385-135000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required)

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☐ Electronic Payment via Patent Center or EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM	6284
25545	7590	04/10/2023	EXAMINER	
Lavery, De Billy, LLP 1 Place Ville Marie, Suite 4000 Montreal, QUEBEC H3B 4M4 CANADA			PEACE, RHONDA S	
			ART UNIT	PAPER NUMBER
			2874	
DATE MAILED: 04/10/2023				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.** Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 18/105,639	Applicant(s) PILON, VINCENT	
	Examiner R. PEACE	Art Unit 2874	AIA (FITF) Status Yes

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

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 2/3/23.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 1-30 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
Certified copies:
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)	5. ☐ Examiner's Amendment/Comment
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 2/3/23 and 3/24/23.	6. ☒ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.	7. ☐ Other _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____.	

/RHONDA S PEACE/ Primary Examiner, Art Unit 2874	
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DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 2/3/23 and 3/24/23 were filed in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Allowable Subject Matter

Claims 1-30 are allowed.

The following is an examiner's statement of reasons for allowance:

Re. Claims 1-8, the prior art does not disclose or reasonably suggest a tray for providing a plurality of different modular fiber optic cassette configurations in a standard U-space fiber optic management system wherein the plurality of different modular fiber optic cassette configurations comprise: *a first modular fiber optic cassette configuration that includes six modular two standard width unit (2W) cassettes that are each arranged side by side of each other along the tray such that a cassette side end portion of each modular two standard width (2W) cassette adjacently faces a cassette side end portion of at least one other modular two standard width (2W) cassette; a second modular fiber optic cassette configuration that includes four modular three standard width unit (3W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular three standard width (3W) cassette adjacently faces a cassette side end portion of at least one other modular three*

standard width (3W) cassette; a third modular fiber optic cassette configuration that includes three modular four standard width unit (4W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular four standard width (4W) cassette adjacently faces a cassette side end portion of at least one other modular four standard width (4W) cassette; a fourth modular fiber optic cassette configuration that includes two modular six standard width unit (6W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the two modular six standard width (6W) cassettes adjacently faces a cassette side end portion of the other modular six standard width (6W) cassette; and a fifth modular fiber optic cassette configuration that includes three modular two standard width unit (2W) cassettes, which are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the three modular two standard width (2W) cassettes adjacently faces a cassette side end portion of one of the other modular two standard width (2W) cassette, and one modular six standard width unit (6W) cassette that is arranged side by side in a row along the tray with one of the three modular two standard width unit (2W) cassettes, such that a cassette side end portion of the one modular six standard width unit (6W) cassette adjacently faces a cassette side end portion of one of the other three modular two standard width unit (2W) cassettes; in combination with the remaining limitations of the claims.

Re. Claims 9-16, the prior art does not disclose or reasonably suggest a tray for providing a plurality of different modular fiber optic cassette configurations in a standard U-space fiber optic management system wherein the plurality of different modular fiber

optic cassette configurations comprise: *a first modular fiber optic cassette configuration that includes six modular 2W standard width unit size cassettes that are each arranged side by side of each other along the tray such that a cassette side end portion of each modular 2W standard width unit size cassette adjacently faces a cassette side end portion of at least one other modular 2W standard width size cassette; a second modular fiber optic cassette configuration that includes four modular 3W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular 3W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 3W standard width size cassette; a third modular fiber optic cassette configuration that includes three modular 4W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular 4W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 4W standard width size cassette; a fourth modular fiber optic cassette configuration that includes two modular 6W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the two modular 6W standard width size cassettes adjacently faces a cassette side end portion of the other modular 6W standard width size cassette; and a fifth modular fiber optic cassette configuration that includes three modular 2W standard width unit size cassettes, which are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the three modular 2W standard width size cassettes adjacently faces a cassette side end portion of one of the other modular 2W standard width size cassette,*

and one modular 6W standard width unit size cassette that is arranged side by side in a row along the tray with one of the three modular 2W standard width unit size cassettes, such that a cassette side end portion of the one modular 6W standard width unit size cassette adjacently faces a cassette side end portion of one of the other three modular 2W standard width unit size cassettes; in combination with the remaining limitations of the claims.

Re. Claims 17-30, the prior art does not disclose or reasonably suggest a tray for providing a plurality of different modular fiber optic cassette configurations in a fiber optic management system wherein the plurality of different modular fiber optic cassette configurations comprise: *a first modular fiber optic cassette configuration that includes six modular 2W standard width unit size cassettes that are each arranged side by side of each other along the tray member such that a cassette side end portion of each modular 2W standard width unit size cassette adjacently faces a cassette side end portion of at least one other modular 2W standard width size cassette; a second modular fiber optic cassette configuration that includes four modular 3W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of each modular 3W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 3W standard width size cassette; a third modular fiber optic cassette configuration that includes three modular 4W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of each modular 4W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 4W standard width size cassette; and a*

fourth modular fiber optic cassette configuration that includes two modular 6W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of one of the two modular 6W standard width size cassettes adjacently faces a cassette side end portion of the other modular 6W standard width size cassette; in combination with the remaining limitations of the claims.

The most applicable prior art, Sedor et al. (US 10,215,944 B2), cited in the IDS filed 2/3/23, fails to disclose or reasonably suggest the claimed invention, specifically those portions *highlighted* above in combination with the remaining limitations of the claims. While Sedor et al. discloses a modular tray system where cassettes of differing widths may be incorporated on a common tray, the same fails to disclose the specific configurations required by the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. PEACE whose telephone number is (571)272-8580. The examiner can normally be reached 9-5 pm.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Uyen-Chau Le can be reached on (571) 272-2397. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center, visit: <https://patentcenter.uspto.gov>. Visit <https://www.uspto.gov/patents/apply/patent-center> for more information about Patent Center and <https://www.uspto.gov/patents/docx> for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RHONDA S PEACE/
Primary Examiner, Art Unit 2874
4/3/23

Notice of References Cited	Application/Control No. 18/105,639		Applicant(s)/Patent Under Reexamination PILON, VINCENT	
	Examiner R. PEACE		Art Unit 2874	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-11435542-B2	09-2022	Pilon; Vincent	G02B6/4455	1/1
*	B	US-11333842-B2	05-2022	Ma; Yanyan	G02B6/4452	1/1
*	C	US-10670822-B2	06-2020	Vogel; Mark A.	G02B6/4455	1/1
*	D	US-10809479-B2	10-2020	Crawford; Dwayne	G02B6/4453	1/1
*	E	US-10042135-B2	08-2018	Murray; David Patrick	G02B6/4455	1/1
*	F	US-20180003912-A1	01-2018	Sedor; Thomas M.	G02B6/4455	1/1
*	G	US-20160062058-A1	03-2016	Dagley; Mark Robert	G02B6/3879	385/56
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20230403

<i>Search Notes</i> 	Application/Control No. 18/105,639	Applicant(s)/Patent Under Reexamination PILON, VINCENT
	Examiner R. PEACE	Art Unit 2874

CPC - Searched*		
Symbol	Date	Examiner
G02B 6/4453-4455 (with text limiting)	04/03/2023	RSP

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
inventor and applicant searches	04/03/2023	RSP
global dossier search	04/03/2023	RSP
see attached SEARCH history notes	04/03/2023	RSP

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
	interference search (USPAT and USPGPub databases)	04/03/2023	RSP

/RHONDA S PEACE/ Primary Examiner, Art Unit 2874	
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Issue Classification 	Application/Control No. 18/105,639	Applicant(s)/Patent Under Reexamination PILON, VINCENT
	Examiner R. PEACE	Art Unit 2874

CPC						
Symbol					Type	Version
G02B		6		4455	F	2013-01-01
G02B		6		46	I	2013-01-01

CPC Combination Sets					
Symbol			Type	Set	Ranking

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	30	
/RHONDA S PEACE/ Primary Examiner, Art Unit 2874	03 April 2023	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	3

U.S. Patent and Trademark Office

Part of Paper No.: 20230403

Issue Classification 	Application/Control No. 18/105,639	Applicant(s)/Patent Under Reexamination PILON, VINCENT
	Examiner R. PEACE	Art Unit 2874

INTERNATIONAL CLASSIFICATION			
CLAIMED			
G02B6/44		6	44
NON-CLAIMED			
G02B6/46		6	46

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	30	
/RHONDA S PEACE/ Primary Examiner, Art Unit 2874	03 April 2023	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	3

U.S. Patent and Trademark Office

Part of Paper No.: 20230403

Issue Classification 	Application/Control No. 18/105,639	Applicant(s)/Patent Under Reexamination PILON, VINCENT
	Examiner R. PEACE	Art Unit 2874

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47															
CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		10		19		28								
	2		11		20		29								
	3		12		21		30								
	4		13		22										
	5		14		23										
	6		15		24										
	7		16		25										
	8		17		26										
	9		18		27										

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 30	
/RHONDA S PEACE/ Primary Examiner, Art Unit 2874 (Primary Examiner) _____ (Date) 03 April 2023		O.G. Print Claim(s) 1	O.G. Print Figure 3

U.S. Patent and Trademark Office

Part of Paper No.: 20230403

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-22)

Approved for use through 05/31/2024. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	18105639
	Filing Date	2023-02-03
	First Named Inventor	Vincent PILON
	Art Unit	
	Examiner Name	
	Attorney Docket Number	G13569-00532-HM

U.S. PATENTS							Remove	
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1	9690064	B2	2017-06-27	Sauter et al.			
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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1	20160062055	A1	2016-03-03	Giraud et al.			
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²ⁱ	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.						T ⁵

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /R.S.P./

/RHONDA S PEACE/ 04/03/2023

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		18105639
	Filing Date		2023-02-03
	First Named Inventor	Vincent PILON	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		G13569-00532-HM

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EXAMINER SIGNATURE

Examiner Signature	/RHONDA S PEACE/	Date Considered	04/03/2023
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /R.S.P./

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	18105639
Filing Date	2023-02-03
First Named Inventor	Vincent PILON
Art Unit	
Examiner Name	
Attorney Docket Number	G13569-00532-HM

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/HUGH MANSFIELD REG #55757/	Date (YYYY-MM-DD)	2023-03-24
Name/Print	Hugh Mansfield	Registration Number	55757

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Bibliographic Data

Application No: 18/105,639

Foreign Priority claimed: ☐ Yes ☒ No

35 USC 119 (a-d) conditions met: ☐ Yes ☒ No ☐ Met After Allowance

Verified and Acknowledged: /RHONDA S PEACE/

Examiner's Signature

Initials

Title:

TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE
CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT
SYSTEM

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
02/03/2023	385	2874	G13569-00532-HM
RULE			

APPLICANTS

BELDEN CANADA ULC,

INVENTORS

VINCENT PILON, LACHINE, CANADA

CONTINUING DATA

This application is a CON of 17929566 09/02/2022

17929566 is a CON of 17010113 09/02/2020 PAT 11435542

17010113 is a CON of 16143831 09/27/2018 PAT 10795107

16143831 has PRO of 62567339 10/03/2017

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

03/03/2023

STATE OR COUNTRY

CANADA

ADDRESS

Lavery, De Billy, LLP

1 Place Ville Marie, Suite 4000

Montreal, QC H3B 4M4

CANADA

FILING FEE RECEIVED

\$7,160

PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	218	G02B6/4455.cpc. and modular	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/04/23 06:55 PM
L2	44	((("BELDEN") near3 ("CANADA") near3 ("INC"))).AS,AANM.	(USPAT)	OR	ON	ON	2019/04/23 07:12 PM
L3	15	((("PILON") near3 ("VINCENT"))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2019/04/23 07:13 PM
L4	2814	G02B6/4455.cpc. not L1	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/04/23 07:55 PM
L5	25	L4 and magnet\$4	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/04/23 07:57 PM
L6	2789	L4 not L5	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/04/23 08:02 PM
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L10	17	G02B6/\$.cpc. and ((standard adj width) same (module or cassette))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/08/07 01:36 PM
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L17	5	L16 and magnet\$4	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/12/17 03:54 PM
L18	1494	G02B6/\$.cpc. and (magnet\$5 same (cassette or module))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/12/17 03:56 PM
L19	70	G02B6/4453-4455.cpc.	(US-PGPUB; USPAT;	OR	ON	ON	2019/12/17

		and (magnet\$5)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)				04:36 PM
L20	26	(US-20160062050-\$ or US-20160062055-\$ or US-20160062058-\$ or US-20160062068-\$ or US-20170192191-\$ or US-20180003912-\$ or US-20180100976-\$ or US-20190004268-\$ or US-20190101717-\$ or US-20090290842-\$ or US-20160033732-\$ or US-20020131730-\$ or US-20070131628-\$).did. or (US- 10215944-\$ or US- 10254497-\$ or US- 9841574-\$ or US- 4792203-\$ or US- 8554044-\$ or US- 4840449-\$ or US- 8913866-\$ or US- 7509015-\$ or US- 9075216-\$ or US- 9008485-\$ or US- 7331722-\$ or US- 10281672-\$).did. or (EP-3404461-\$).did.	(US-PGPUB; USPAT; FPRS)	OR	ON	ON	2019/12/17 04:45 PM
L21	6	(US-20090290842-\$ or US-20160062050-\$ or US-20190004268-\$ or US-20190101717-\$).did. or (US- 10215944-\$ or US- 4792203-\$).did.	(US-PGPUB; USPAT)	OR	ON	ON	2019/12/17 04:45 PM
L22	20	L20 not L21	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2019/12/17 04:46 PM
L24	1	("2019/0101717").URP N.	(USPAT)	OR	ON	ON	2020/05/18 10:11 AM
L25	35	("20020150370" "20050237721" "20110274402" "20130188919" "20150219866" "20170269324" "20190101717" "20190107682" "4595255" "4752110" "4884863" "4971421" "5208894" "5519804" "5546495" "5737475" "5825962" "5835657"	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2020/05/18 10:12 AM

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L27	8985	G02B6/4453-4455.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2020/05/18 10:24 AM
L28	674	L27 and modular	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2020/05/18 10:27 AM
L29	82	L27 and (((dissimilar or differ\$4 or varying or various or variable) near4 (size or footprint or width)) same (module or cassette))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2020/05/18 10:37 AM
L30	2	("20190187394" "9223094").PN. OR ("10514518").URPN.	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2020/05/18 10:39 AM
L31	29	(US-20160062050-\$ or US-20160062055-\$ or US-20160062058-\$ or US-20160062068-\$ or US-20170192191-\$ or US-20180003912-\$ or US-20180100976-\$ or US-20190004268-\$ or US-20190101717-\$ or US-20090290842-\$ or US-20160033732-\$ or US-20020131730-\$ or US-20070131628-\$ or US-20190107682-\$ or US-20190187394- \$).did. or (US- 10215944-\$ or US- 10254497-\$ or US- 9841574-\$ or US- 4792203-\$ or US- 8554044-\$ or US-	(US-PGPUB; USPAT; FPRS)	OR	ON	ON	2020/05/18 10:43 AM

		4840449-\$ or US-8913866-\$ or US-7509015-\$ or US-9075216-\$ or US-9008485-\$ or US-7331722-\$ or US-10281672-\$ or US-10514518-\$.did. or (EP-3404461-\$.did.					
L32	6	(US-20090290842-\$ or US-20160062050-\$ or US-20190004268-\$ or US-20190101717-\$.did. or (US-10215944-\$ or US-4792203-\$.did.	(US-PGPUB; USPAT)	OR	ON	ON	2020/05/18 10:43 AM
L33	9	(US-20020131730-\$ or US-20070131628-\$ or US-20160033732-\$.did. or (US-10281672-\$ or US-7331722-\$ or US-7509015-\$ or US-8913866-\$ or US-9008485-\$ or US-9075216-\$.did.	(US-PGPUB; USPAT)	OR	ON	ON	2020/05/18 10:43 AM
L34	14	L31 not (L32 or L33)	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2020/05/18 10:44 AM
L35	19	("10215944" OR "10281672" OR "10514518" OR "20070131628" OR "20090290842" OR "20160033732" OR "20160062050" OR "20190004268" OR "20190101717" OR "20190107682" OR "20190162924" OR "20190187394" OR "20200131730" OR "4792203" OR "7331722" OR "7509015" OR "8913866" OR "9008485" OR "9075216").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2021/09/07 02:14 PM
L36	27	((("PILON") near3 ("VINCENT"))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2021/09/07 03:33 PM
L37	30	((EP-3404461-A1).did. AND FPRS.dbnm.) OR ((US-20160062050-A1	(USPAT; US-PGPUB; FPRS; USOCR; IBM_TDB; EPO; JPO;	OR	ON	ON	2021/09/07 03:50 PM

		OR US-20160062055-A1 OR US-20160062058-A1 OR US-20160062068-A1 OR US-20170192191-A1 OR US-20180003912-A1 OR US-20180100976-A1 OR US-20190004268-A1 OR US-20190101717-A1 OR US-20090290842-A1 OR US-20160033732-A1 OR US-20020131730-A1 OR US-20070131628-A1 OR US-20190107682-A1 OR US-20190187394-A1 OR US-20190162924-A1).did. AND PGPB.dbnm.) OR ((US-10215944-B2 OR US-10254497-B2 OR US-9841574-B1 OR US-4792203-A OR US-8554044-B2 OR US-4840449-A OR US-8913866-B2 OR US-7509015-B2 OR US-9075216-B2 OR US-9008485-B2 OR US-7331722-B2 OR US-10281672-B1 OR US-10514518-B1).did. AND USPT.dbnm.)	DERWENT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN))				
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L39	11	L38 NOT L35	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2021/09/07 03:51 PM
L40	2	"6208593".pn.	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2021/12/16 02:15 PM
L41	15	"2030171"	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2021/12/16 02:16 PM
L42	30	((EP-3404461-A1).did. AND FPRS.dbnm.) OR ((US-20160062050-A1 OR US-20160062055-A1 OR US-20160062058-A1 OR US-20160062068-A1 OR US-20170192191-A1 OR US-20180003912-A1 OR US-20180100976-A1	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2021/12/16 02:29 PM

		OR US-20190004268-A1 OR US-20190101717-A1 OR US-20090290842-A1 OR US-20160033732-A1 OR US-20020131730-A1 OR US-20070131628-A1 OR US-20190107682-A1 OR US-20190187394-A1 OR US-20190162924-A1).did. AND PGPB.dbnm.) OR ((US-10215944-B2 OR US-10254497-B2 OR US-9841574-B1 OR US-4792203-A OR US-8554044-B2 OR US-4840449-A OR US-8913866-B2 OR US-7509015-B2 OR US-9075216-B2 OR US-9008485-B2 OR US-7331722-B2 OR US-10281672-B1 OR US-10514518-B1).did. AND USPT.dbnm.)					
L43	32	(Artificial Intelligence) More like doc: US-10215944-B2 Text: (US-9075216-B2 OR US-20110268404-A1 OR JP-2019525225-A OR TW-I708084-B OR CN-109416449-B OR TW-201812364-A OR EP-3479153-A1 OR WO-2018005222-A1 OR US-20180003912-A1 OR CN-109416449-A OR US-10795107-B2 OR CA-3019081-A1 OR US-20190101717-A1 OR US-20200400908-A1 OR JP-2017531205-A OR TW-202115446-A OR US-20200341223-A1 OR EP-3671301-A1 OR US-20160299308-A1 OR CN-112612091-A).did.	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/02/25 11:49 AM
L44	35	(Artificial Intelligence) More like doc: US-20200400908-A1 Text:	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU,	OR	ON	ON	2022/02/25 11:50 AM

		(US-20190219786-A1 OR CA-3030399-A1 OR US-20180011275-A1 OR US-10185108-B2 OR CA-2972850-A1 OR CN-109416449-A OR US-20210109304-A1 OR US-11036020-B2 OR EP-1185897-B1 OR US-10795107-B2 OR US-20210072482-A1 OR CA-3019081-A1 OR US-20190101717-A1 OR TW-I708084-B OR TW-201812364-A OR JP-2019525225-A OR CN-109416449-B OR US-20200310064-A1 OR US-10866378-B2 OR US-11187864-B2).did.	CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L45	28	(Artificial Intelligence) More like doc: US-10215944-B2 Text: (US-9075216-B2 OR US-20110268404-A1 OR JP-2019525225-A OR TW-463066-B OR TW-I708084-B OR JP-7033090-B2 OR TW-201812364-A OR CN-109416449-B OR CN-109416449-A OR EP-3479153-A1 OR WO-2018005222-A1 OR US-20180003912-A1 OR US-10795107-B2 OR CA-3019081-A1 OR US-20190101717-A1 OR US-20200400908-A1 OR JP-2017531205-A OR TW-I755857-B OR TW-202115446-A OR US-20200341223-A1).did.	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/04/22 01:28 PM
L46	39	(Artificial Intelligence) More like doc: US-20200400908-A1 Text: (EP-2277071-A2 OR US-20190219786-A1 OR CN-102844693-A OR CA-3030399-A1 OR US-10185108-B2 OR US-20210109304-A1 OR US-11036020-B2	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO,	OR	ON	ON	2022/04/22 01:29 PM

		OR EP-1185897-B1 OR US-20210072482-A1 OR US-10795107-B2 OR CA-3019081-A1 OR US-20190101717-A1 OR CN-102844693-B OR US-11249269-B2 OR US-20200257071- A1 OR US- 20200310064-A1 OR US-10866378-B2 OR US-6504986-B1 OR US-11187864-B2 OR US-20220057590- A1).did.	RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L47	2607	G02B6/4455.cpc.	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2022/04/22 01:34 PM
L48	830	L47 AND (tray WITH (module OR cassette))	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2022/04/22 01:35 PM
L49	38	((US-20190162924-A1 OR US-20160062050- A1 OR US- 20160062055-A1 OR US-20160062058-A1 OR US-20160062068- A1 OR US- 20170192191-A1 OR US-20180003912-A1 OR US-20180100976- A1 OR US- 20190004268-A1 OR US-20190101717-A1 OR US-20090290842- A1 OR US- 20160033732-A1 OR US-20190187394-A1 OR US-20190107682- A1 OR US- 20070131628-A1 OR US-20020131730- A1).did. AND PGPB.dbnm.) OR ((US- 10215944-B2 OR US-	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2022/04/22 03:56 PM

		10254497-B2 OR US-9841574-B1 OR US-4792203-A OR US-8554044-B2 OR US-10514518-B1 OR US-10281672-B1 OR US-7331722-B2 OR US-9008485-B2 OR US-9075216-B2 OR US-7509015-B2 OR US-8913866-B2 OR US-4840449-A OR US-11187864-B2 OR US-10795107-B2 OR US-10768387-B2 OR US-10598884-B2 OR US-10656359-B2 OR US-10359595-B2 OR US-9690064-B2).did. AND USPT.dbnm.) OR ((EP-3404461-A1).did. AND FPRS.dbnm.) OR ((US-20200400908-A1).did. AND DWPI.dbnm.)					
L50	19	("10215944" OR "10281672" OR "10514518" OR "20070131628" OR "20090290842" OR "20160033732" OR "20160062050" OR "20190004268" OR "20190101717" OR "20190107682" OR "20190162924" OR "20190187394" OR "20200131730" OR "4792203" OR "7331722" OR "7509015" OR "8913866" OR "9008485" OR "9075216").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2022/04/22 03:56 PM
L51	18	L49 NOT L50	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2022/04/22 03:56 PM
L52	16	L51 NOT (((US-20160062068-A1 OR US-20180003912-A1).did AND PGPB.dbnm))	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP,	OR	ON	ON	2022/04/22 03:57 PM

			ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))				
L53	38	((US-20160062050-A1 OR US-20020131730-A1 OR US-20070131628-A1 OR US-20190107682-A1 OR US-20190187394-A1 OR US-20090290842-A1 OR US-20190162924-A1 OR US-20160062055-A1 OR US-20160062058-A1 OR US-20160062068-A1 OR US-20170192191-A1 OR US-20180003912-A1 OR US-20180100976-A1 OR US-20190004268-A1 OR US-20190101717-A1 OR US-20160033732-A1).did. AND PGPB.dbnm.) OR ((EP-3404461-A1).did. AND FPRS.dbnm.) OR ((US-4840449-A OR US-8913866-B2 OR US-7509015-B2 OR US-9075216-B2 OR US-9008485-B2 OR US-7331722-B2 OR US-10281672-B1 OR US-10514518-B1 OR US-8554044-B2 OR US-10215944-B2 OR US-10254497-B2 OR US-9841574-B1 OR US-4792203-A OR US-11187864-B2 OR US-10795107-B2 OR US-10768387-B2 OR US-10598884-B2 OR US-10656359-B2 OR US-10359595-B2 OR US-9690064-B2).did. AND USPT.dbnm.) OR ((US-20200400908-A1).did. AND DWPI.dbnm.)	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)	OR	ON	ON	2023/03/02 06:30 AM
L54	29	(Artificial Intelligence) More like doc: US-10215944-B2 Text: (EP-3479153-A1 OR	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA,	OR	ON	ON	2023/03/02 06:41 AM

		WO-2018005222-A1 OR US-20180003912-A1 OR KR-20190021243-A OR CN-109416449-B OR KR-102480586-B1 OR US-20220299724-A1 OR US-20200341223-A1 OR US-11372185-B2 OR US-20190154936-A1 OR JP-2019525225-A OR JP-7033090-B2 OR CN-112612091-A OR US-10725258-B2 OR TW-201812364-A OR TW-I755857-B OR TW-I708084-B OR TW-202115446-A OR MX-2018015550-A OR CN-109416449-A).did.	EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
L55	27	("10215944" OR "10281672" OR "10359595" OR "10514518" OR "10598884" OR "10656359" OR "10768387" OR "10795107" OR "11187864" OR "20020131730" OR "20070131628" OR "20090290842" OR "20160033732" OR "20160062050" OR "20160062068" OR "20190004268" OR "20190101717" OR "20190107682" OR "20190162924" OR "20190187394" OR "20200131730" OR "4792203" OR "7331722" OR "7509015" OR "8913866" OR "9008485" OR "9075216").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2023/03/02 06:41 AM
L56	51	(vincent near2 pilon).in.	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/03/02 06:45 AM

L57	6956	G02B6/4453-4455.cpc.	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/03/02 06:52 AM
L58	39	L57 AND (standard ADJ width)	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/03/02 06:53 AM
L59	1460	L57 AND (modular\$4)	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/03/02 06:54 AM
L60	10	L53 NOT L55	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/03/02 07:22 AM
L61	35	((("PILON") near3 ("VINCENT"))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2023/04/03 10:04 AM
L62	13	((("BELDEN") near3 ("CANADA") near3 ("ULC"))).AS,AANM.	(USPAT)	OR	ON	ON	2023/04/03 10:06 AM
L63	28	("20160062055" OR "9690064" OR "10215944" OR "10281672" OR "10359595" OR "10514518" OR "10598884" OR "10656359" OR "10768387" OR "10795107" OR "11187864" OR "20020131730" OR "20070131628" OR	(US-PGPUB; USPAT)	OR	ON	ON	2023/04/03 10:07 AM

		"20090290842" OR "20160033732" OR "20160062050" OR "20160062068" OR "20190004268" OR "20190101717" OR "20190107682" OR "20190162924" OR "20190187394" OR "4792203" OR "7331722" OR "7509015" OR "8913866" OR "9008485" OR "9075216").pn.					
L64	7016	G02B6/4453-4455.cpc.	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/04/03 10:12 AM
L65	110	L64 AND ((1W OR 2W OR 3W OR 4W OR 6W) OR (standard near3 width))	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/04/03 10:20 AM
L66	1330	L64 AND (modular)	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/04/03 10:28 AM
L67	1290	L66 NOT L65	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/04/03 10:29 AM
L68	64	((EP-3404461-A1).did. AND FPRS.dbnm.) OR ((US-20160033732-A1 OR US-20190101717- A1 OR US-	(US-PGPUB; USPAT; USOCR; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA,	OR	ON	ON	2023/04/03 10:48 AM

		20190004268-A1 OR US-20180100976-A1 OR US-20180003912-A1 OR US- 20170192191-A1 OR US-20160062068-A1 OR US-20160062058-A1 OR US- 20160062055-A1 OR US-20190162924-A1 OR US-20160062050-A1 OR US- 20020131730-A1 OR US-20070131628-A1 OR US-20190107682-A1 OR US- 20190187394-A1 OR US-20090290842-A1 OR US-20220082773-A1 OR US- 20220043228-A1 OR US-20160070081-A1 OR US-20120288248-A1 OR US- 20190219786-A1).did. AND PGPB.dbnm.) OR ((US-4792203-A OR US-9841574-B1 OR US-10254497-B2 OR US-10215944-B2 OR US-8554044-B2 OR US-4840449-A OR US- 8913866-B2 OR US- 7509015-B2 OR US- 9075216-B2 OR US- 9008485-B2 OR US- 7331722-B2 OR US- 10281672-B1 OR US- 10514518-B1 OR US- 11187864-B2 OR US- 10795107-B2 OR US- 10768387-B2 OR US- 10598884-B2 OR US- 10656359-B2 OR US- 10359595-B2 OR US- 9690064-B2 OR US- 11435542-B2 OR US- 10928603-B2 OR US- 10809479-B2 OR US- 10809466-B2 OR US- 10678011-B2 OR US- 11002933-B2 OR US- 10042135-B2 OR US- 10107981-B2 OR US- 8731361-B2 OR US- 7439453-B2 OR US- 7460758-B2 OR US- 6854894-B1 OR US-	EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO); FPRS; EPO; JPO; DERWENT; IBM_TDB)				
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		6684005-B1 OR US-6999654-B1 OR US-11333842-B2 OR US-10969554-B2 OR US-10859782-B2 OR US-10670822-B2 OR US-11169347-B2 OR US-8301003-B2 OR US-9134497-B2).did. AND USPT.dbnm.) OR ((US-20200400908-A1).did. AND DWPI.dbnm.)					
L69	34	L68 NOT L63	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/04/03 10:48 AM
L70	7	((US-20180003912-A1 OR US-20160062058-A1).did AND PGPB.dbnm) OR ((US-10670822-B2 OR US-10809479-B2 OR US-10042135-B2 OR US-11435542-B2 OR US-11333842-B2).did AND USPT.dbnm))	(US-PGPUB; USPAT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO))	OR	ON	ON	2023/04/03 10:56 AM
L71	1	(15/628818).APP.	(USPAT; USOCR)	OR	ON	ON	2023/04/03 11:15 AM
L72	200	("2056219" "2550339" "3392543" "3478535" "4034572" "4266853" "4585303" "4655521" "4792203" "4824196" "4846565" "4986762" "5046811" "5129030" "5142606" "5167001" "5212761" "5325455" "5339379" "5370541" "5442726" "5448670" "5490229" "5497444" "5511144" "5647043" "5717810" "5758003" "5804765" "5836786" "5902155" "5946440" "5978540" "6017238" "6080011" "6085003" "6086415" "6095852" "6109978" "6167183" "6203130" "6210216" "6356697" "6396992" "6591051" "6768860"	(US-PGPUB; USPAT; USOCR)	OR	ON	ON	2023/04/03 11:16 AM

		"6769551" "6771861"					
		"6788846" "6920274"					
		"6944389" "6946600"					
		"6974438" "7000784"					
		"7031588" "7087840"					
		"7113687" "7147383"					
		"7200314" "7200316"					
		"7318321" "7320507"					
		"7330629" "7376321"					
		"RE40375"					
		"7416347" "7418182"					
		"7509015" "7529458"					
		"7532799" "7570861"					
		"7628644" "7672561"					
		"7681187" "7682187"					
		"7686518" "7689089"					
		"7722411" "7729586"					
		"7744176" "7756378"					
		"7756380" "7760983"					
		"7826705" "D628462"					
		"7854333" "7856166"					
		"7876995" "7887244"					
		"7889961" "7903925"					
		"7945135" "7945136"					
		"7962000" "7974105"					
		"7979985" "8014646"					
		"8038015" "8038354"					
		"8061534" "8075198"					
		"8075344" "8121458"					
		"8135257" "8154886"					
		"8179684" "8184938"					
		"8203450" "8254742"					
		"8280216" "8285104"					
		"8290332" "8290333"					
		"8297854" "8301004"					
		"8326107" "8331752"					
		"8403599" "8411465"					
		"8418974" "8433171"					
		"8437147" "8437597"					
		"8452148" "8452149"					
		"8472776" "8520996"					
		"8538226" "8559783"					
		"8565572" "8625950"					
		"8625951" "8705926"					
		"8712206" "8746466"					
		"8867883" "8879881"					
		"8934253" "8938147"					
		"8953924" "8965168"					
		"8992099" "9008485"					
		"9020320" "9075216"					
		"9075217" "9116324"					
		"9140870" "9170392"					
		"9213161" "9213363"					
		"9279951" "9690065"					
		"20060018622"					
		"20080089656"					
		"20080175552"					
		"20090245743"					

		"20100051886" "20100052346" "20100054684" "20100296791" "20100310225" "20100316334" "20100322580" "20100322581" "20100322582" "20100322583" "20110268405" "20110268406" "20110268408" "20110268410" "20110268411" "20110274402" "20120114295" "20130011105" "20130028567" "20130121657" "20130148935" "20130214662" "20130251319" "20130251326" "20130287357" "20140010511" "20140079365" "20160033732" "20160062050" "20160062055" "20160062058" "20160062068" "20160299308").pn. OR ("10215944").urpn. AND (PGPB USPT USOC).dbnm.					
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PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N23	72	((cassette or module) and metal\$4 and optic\$4 and (fiber or fibre) and magnet\$4 and (tray or housing or drawer or slide)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2019/12/17 04:33 PM
N35	3	(tray and cassette and (fiber or fibre) and optic\$4 and standard and width and (fasten\$4 or lock\$4 or secur\$4 or attach\$4 or fix\$4)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2020/05/18 10:48 AM
N36	7	(tray and cassette and (fiber or fibre) and optic\$4 and width and (fasten\$4 or lock\$4 or	(US-PGPUB; USPAT)	OR	ON	ON	2020/05/18 10:49 AM

		secur\$4 or attach\$4 or fix\$4)).clm.					
N37	104	((fiber OR fibre) AND optic\$4 AND (cassette OR module) AND tray AND slid\$7 AND (receptacle OR adapter OR plug) AND (fasten\$4 OR attach\$4 OR fix\$4 OR position\$4)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/04/22 03:17 PM
N38	21	(method AND tray AND (fiber OR fibre) AND optic\$4 AND (module OR cassette) AND width).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2022/04/22 03:53 PM
N39	9	(cassette AND (fiber OR fibre) AND optic\$4 AND tray AND standard AND width AND slid\$7).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2023/03/02 07:26 AM
N40	9	(tray AND (fiber OR fibre) AND optic\$4 AND cassette AND standard AND width AND (plug OR adapter OR connect\$4)).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2023/04/03 11:27 AM
N41	9	(tray AND (fiber OR fibre) AND optic\$4 AND cassette AND standard AND width).clm.	(US-PGPUB; USPAT)	OR	ON	ON	2023/04/03 11:28 AM

Receipt date: 02/03/2023

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-22)

Approved for use through 05/31/2024. OMB 0651-0031

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	18/105,639 - GAU: 2874
	Filing Date	
	First Named Inventor	Vincent PILON
	Art Unit	
	Examiner Name	
	Attorney Docket Number	G13569-00532-HM

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	4792203	A	1988-12-20	Nelson et al.	
	2	7331722	B2	2008-02-19	Tan	
	3	7509015	B2	2009-05-24	Murano	
	4	8913866	B2	2014-12-16	Cote et al.	
	5	9008485	B2	2015-04-14	Ramirez et al.	
	6	9075216	B2	2015-07-07	Cote et al.	
	7	9690064	B2	2017-06-27	Sauter et al.	
	8	10215944	B2	2019-02-26	Sedor et al.	

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Receipt date: 02/03/2023

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		18/105,639 ~ GAU: 2874	
	Filing Date			
	First Named Inventor	Vincent PILON		
	Art Unit			
	Examiner Name			
	Attorney Docket Number		G13569-00532-HM	

	9	10281672	B1	2019-05-07	Mullsteff	
	10	10359595	B2	2019-07-23	Aramayo et al.	
	11	10514518	B2	2019-12-24	Livingston et al.	
	12	10598884	B2	2020-03-24	Fontaine et al.	
	13	10656359	B2	2020-05-19	Fontaine et al.	
	14	10768387	B2	2020-09-08	Pilon et al.	
	15	10795107	B2	2020-10-06	Pilon	
	16	11187864	B2	2021-11-30	Crawford et al.	

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U.S.PATENT APPLICATION PUBLICATIONS

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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20020131730	A1	2002-09-19	Keeble et al.	

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Receipt date: 02/03/2023

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		18/105,639 - GAU: 2874
	Filing Date		
	First Named Inventor	Vincent PILON	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		G13569-00532-HM

	2	20070131628	A1	2007-06-14	Mimlitch	
	3	20090290842	A1	2009-11-26	Bran de Leon et al.	
	4	20160033732	A1	2016-02-04	Giraud et al.	
	5	20160062050	A1	2016-03-03	Giraud et al.	
	6	20160062068	A1	2016-03-03	Giraud et al.	
	7	20190004268	A1	2019-01-03	Vogel	
	8	20190101717	A1	2019-04-04	Pilon	
	9	20190107682	A1	2019-04-11	Aramayo et al.	
	10	20190162924	A1	2019-05-30	Fontaine et al.	
	11	20190187394	A1	2019-06-20	Fontaine et al.	
	12					

Receipt date: 02/03/2023

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		18/105,639 - GAU: 2874	
	Filing Date			
	First Named Inventor	Vincent PILON		
	Art Unit			
	Examiner Name			
	Attorney Docket Number		G13569-00532-HM	

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FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
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Examiner Signature	/RHONDA S PEACE/	Date Considered	04/03/2023
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	
First Named Inventor	Vincent PILON
Art Unit	
Examiner Name	
Attorney Docket Number	G13569-00532-HM

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

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See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/HUGH MANSFIELD Reg.#55757/	Date (YYYY-MM-DD)	2023-02-03
Name/Print	Hugh Mansfield	Registration Number	55757

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	18105639
	Filing Date	2023-02-03
	First Named Inventor	Vincent PILON
	Art Unit	
	Examiner Name	
	Attorney Docket Number	G13569-00532-HM

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Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1	9690064	B2	2017-06-27	Sauter et al.			
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear		
	1	20160062055	A1	2016-03-03	Giraud et al.			
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		18105639
	Filing Date		2023-02-03
	First Named Inventor	Vincent PILON	
	Art Unit		
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	Attorney Docket Number		G13569-00532-HM

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	Filing Date	2023-02-03
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	Art Unit	
	Examiner Name	
	Attorney Docket Number	G13569-00532-HM

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☒ A certification statement is not submitted herewith.

SIGNATURE

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Signature	/HUGH MANSFIELD REG.#55757/	Date (YYYY-MM-DD)	2023-03-24
Name/Print	Hugh Mansfield	Registration Number	55757

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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #
18/105,639

RECEIPT DATE / TIME
03/24/2023 02:24:54 PM ET

ATTORNEY DOCKET #
G13569-00532-HM

Title of Invention

TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM

Application Information

APPLICATION TYPE Utility - Nonprovisional Application
under 35 USC 111(a)

PATENT # -

CONFIRMATION # 6284

FILED BY Regeline Jean Francois

PATENT CENTER # 61802988

FILING DATE 02/03/2023

CUSTOMER # 25545

FIRST NAMED INVENTOR VINCENT PILON

CORRESPONDENCE ADDRESS -

AUTHORIZED BY Hugh Mansfield

Documents

TOTAL DOCUMENTS: 1

DOCUMENT	PAGES	DESCRIPTION	SIZE (KB)
2501-USPTO-FORM_SB08_IDS.pdf	4	Information Disclosure Statement (IDS) Form (SB08)	1234 KB

Digest

DOCUMENT	MESSAGE DIGEST(SHA-512)
2501-USPTO-FORM_SB08_IDS.pdf	6CBA5B3183E8A01D85F6C584FB6DCE37F695ECC2554DA4CA78DCA30972886CD2CD21828A1A25C8903F1983A6DF704D8C03AF3D1C720B1A87B30B33B7679F338D

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/105,639	02/03/2023	VINCENT PILON	G13569-00532-HM	6284
25545	7590	03/24/2023	EXAMINER	
Lavery, De Billy, LLP 1 Place Ville Marie, Suite 4000 Montreal, QUEBEC H3B 4M4 CANADA			CENTRAL, DOCKET	
			ART UNIT	PAPER NUMBER
			2874	
			NOTIFICATION DATE	DELIVERY MODE
			03/24/2023	ELECTRONIC

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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uspto@lavery.ca

<i>Decision Granting Request for Prioritized Examination (Track I)</i>	Application No. 18/105,639	Applicant(s) PILON, VINCENT	
	Examiner FIKIRTE A GEREMEW	Art Unit OMBL	AIA (FITF) Status Yes
1. THE REQUEST FILED <u>03 February 2023</u> IS GRANTED . The above-identified application has met the requirements for prioritized examination A. ☒ for an original nonprovisional application (Track I). B. ☐ for an application undergoing continued examination (RCE). 2. The above-identified application will undergo prioritized examination. The application will be accorded special status throughout its entire course of prosecution until one of the following occurs: A. filing a <u>petition for extension of time</u> to extend the time period for filing a reply; B. filing an <u>amendment to amend the application to contain more than four independent claims, more than thirty total claims</u>, or a multiple dependent claim; C. filing a <u>request for continued examination</u> ; D. filing a notice of appeal; E. filing a request for suspension of action; F. mailing of a notice of allowance; G. mailing of a final Office action; H. completion of examination as defined in 37 CFR 41.102; or I. abandonment of the application. Telephone inquiries with regard to this decision should be directed to FIKIRTE GEREMEW at (703) 756-1930. In his/her absence, calls may be directed to Petition Help Desk at (571) 272-3282.			
/FIKIRTE A GEREMEW/ PROGRAM SUPPORT ASSISTANT, OMBL			



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
18/105,639	02/03/2023		2820	G13569-00532-HM	30	3

CONFIRMATION NO. 6284

FILING RECEIPT



0000000054416730

25545

Lavery, De Billy, LLP
1 Place Ville Marie, Suite 4000
Montreal, QC H3B 4M4
CANADA

Date Mailed: 03/06/2023

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

VINCENT PILON, LACHINE, CANADA;

Applicant(s)

BELDEN CANADA ULC, SAINT-LAURENT, CANADA;

Power of Attorney: The patent practitioners associated with Customer Number 25545

Domestic Priority data as claimed by applicant

This application is a CON of 17/929,566 09/02/2022
which is a CON of 17/010,113 09/02/2020 PAT 11,435,542
which is a CON of 16/143,831 09/27/2018 PAT 10,795,107
which claims benefit of 62/567,339 10/03/2017

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 03/03/2023

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 18/105,639**

Projected Publication Date: 06/15/2023

Non-Publication Request: No

Early Publication Request: No
Title

TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC
MANAGEMENT SYSTEM

Preliminary Class

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

page 2 of 4

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

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This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD						Application or Docket Number 18/105,639	
Substitute for Form PTO-875							
APPLICATION AS FILED - PART I							
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	320
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	700
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	800
TOTAL CLAIMS (37 CFR 1.16(i))	30 minus 20 =	*				x 100 =	1000
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3 minus 3 =	*				x =	0
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						0
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0
			TOTAL			TOTAL	1820
* If the difference in column 1 is less than zero, enter "0" in column 2.							
APPLICATION AS AMENDED - PART II							
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		OTHER THAN SMALL ENTITY
	Total (37 CFR 1.16(i))	* Minus **	=	x =			x =
	Independent (37 CFR 1.16(h))	* Minus ***	=	x =			x =
	Application Size Fee (37 CFR 1.16(s))						
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
				TOTAL ADD'L FEE			TOTAL ADD'L FEE
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY	
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		OTHER THAN SMALL ENTITY
	Total (37 CFR 1.16(i))	* Minus **	=	x =			x =
	Independent (37 CFR 1.16(h))	* Minus ***	=	x =			x =
	Application Size Fee (37 CFR 1.16(s))						
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
				TOTAL ADD'L FEE			TOTAL ADD'L FEE
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.							

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-22)

Approved for use through 05/31/2024. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		
	First Named Inventor	Vincent PILON	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	G13569-00532-HM	

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4792203	A	1988-12-20	Nelson et al.	
	2	7331722	B2	2008-02-19	Tan	
	3	7509015	B2	2009-05-24	Murano	
	4	8913866	B2	2014-12-16	Cote et al.	
	5	9008485	B2	2015-04-14	Ramirez et al.	
	6	9075216	B2	2015-07-07	Cote et al.	
	7	9690064	B2	2017-06-27	Sauter et al.	
	8	10215944	B2	2019-02-26	Sedor et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
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	First Named Inventor	Vincent PILON	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	G13569-00532-HM	

	9	10281672	B1	2019-05-07	Mullsteff	
	10	10359595	B2	2019-07-23	Aramayo et al.	
	11	10514518	B2	2019-12-24	Livingston et al.	
	12	10598884	B2	2020-03-24	Fontaine et al.	
	13	10656359	B2	2020-05-19	Fontaine et al.	
	14	10768387	B2	2020-09-08	Pilon et al.	
	15	10795107	B2	2020-10-06	Pilon	
	16	11187864	B2	2021-11-30	Crawford et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

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U.S.PATENT APPLICATION PUBLICATIONS

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Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20020131730	A1	2002-09-19	Keeble et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		
	First Named Inventor	Vincent PILON	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	G13569-00532-HM	

	2	20070131628	A1	2007-06-14	Mimlitch	
	3	20090290842	A1	2009-11-26	Bran de Leon et al.	
	4	20160033732	A1	2016-02-04	Giraud et al.	
	5	20160062050	A1	2016-03-03	Giraud et al.	
	6	20160062068	A1		Giraud et al.	
	7	20190004268	A1	2019-01-03	Vogel	
	8	20190101717	A1	2019-04-04	Pilon	
	9	20190107682	A1	2019-04-11	Aramayo et al.	
	10	20190162924	A1	2019-05-30	Fontaine et al.	
	11	20190187394	A1	2019-06-20	Fontaine et al.	
	12					

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		
	First Named Inventor	Vincent PILON	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	G13569-00532-HM	

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS								Remove
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Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button.

NON-PATENT LITERATURE DOCUMENTS								Remove
--	--	--	--	--	--	--	--	---------------------------------------

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1		

If you wish to add additional non-patent literature document citation information please click the Add button.

EXAMINER SIGNATURE			
---------------------------	--	--	--

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		
	First Named Inventor	Vincent PILON	
	Art Unit		
	Examiner Name		
	Attorney Docket Number	G13569-00532-HM	

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/HUGH MANSFIELD Reg.#55757/	Date (YYYY-MM-DD)	2023-02-03
Name/Print	Hugh Mansfield	Registration Number	55757

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		
First Named Inventor/Applicant Name:		Vincent Pilon		
Filer:		Hugh Mansfield		
Attorney Docket Number:		G13569-00532-HM		
Filed as Large Entity				
Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY APPLICATION FILING	1011	1	320	320
UTILITY SEARCH FEE	1111	1	700	700
UTILITY EXAMINATION FEE	1311	1	800	800
REQUEST FOR PRIORITIZED EXAMINATION	1817	1	4200	4200
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	1202	10	100	1000
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	1830	1	140	140
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				7160

Electronic Acknowledgement Receipt	
EFS ID:	47479696
Application Number:	18105639
International Application Number:	
Confirmation Number:	6284
Title of Invention:	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM
First Named Inventor/Applicant Name:	Vincent Pilon
Customer Number:	25545
Filer:	Hugh Mansfield
Filer Authorized By:	
Attorney Docket Number:	G13569-00532-HM
Receipt Date:	03-FEB-2023
Filing Date:	
Time Stamp:	17:09:44
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$7160
RAM confirmation Number	E202323H13272968
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	2501-USPTO-Transmittal.pdf	286000	no	2
			3ae01a7b312086be35f4a7a8efba7112742e9b74		
Warnings:					
Information:					
2	Application Data Sheet	2501-USPTO-ADS.pdf	1260986	no	9
			29254ab6f5ff55f67e0aa12c6307c18d88e92cec		
Warnings:					
Information:					
3	Track One Request	2501-USPTO-TRACK1REQ.pdf	120703	no	2
			16fb1ba55670e7483771aedc904f41082628e1ee		
Warnings:					
Information:					
4		2501-USPTO-APPLICATION-Cassette-Track-1-Final.pdf	139155	yes	30
			8c4789f60ff9b945c7af170dd3b0205b7eb5063f		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	17	
	Claims		18	29	
	Abstract		30	30	
Warnings:					
Information:					
5	Oath or Declaration filed	2501-Declaration-Pilon.pdf	329983	no	1
			b03cabdc4b06828ffcced6c90400b5f7441bf53d		

Warnings:					
Information:					
6	Power of Attorney	POA-BELDEN_ULC-.pdf	447125	no	1
			806a16cc16f958ee6c781327477195f0f021ceb7		
Warnings:					
Information:					
7	Drawings-only black and white line drawings	2501-USPTO-DRAWINGS.pdf	1277660	no	13
			d40684aa031dff1736e1c9e216a2fafa1eb45977		
Warnings:					
Information:					
8	Assignee showing of ownership per 37 CFR 3.73	2501-USPTO-Statement_Under_37_CFR_3-73.pdf	120728	no	3
			7ed166252889a5429af63239c2b09bcd29d0da00		
Warnings:					
Information:					
9	Information Disclosure Statement (IDS) Form (SB08)	2501-USPTO-FORM_SB08_IDS.pdf	1264140	no	6
			426bc83c5a09de0f91a6360b27a917068751e0c2		
Warnings:					
Information:					
A U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form. You may remove the form to add the required data in order to correct the Informational Message or if you chose not to, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
10	Fee Worksheet (SB06)	fee-info.pdf	53084	no	2
			d551317b1e5a1647fcfcb351c7f0f58c9d848b11		
Warnings:					
Information:					
Total Files Size (in bytes):			5299564		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL (Only for new nonprovisional applications under 37 CFR 1.53(b))	Attorney Docket No.	G13569-00532-HM	
	First Named Inventor	Vincent PILON	
	Title	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A P	
	Priority Mail Express® Label No.		

APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450		
1. ☐ Fee Transmittal Form (PTO/SB/17 or equivalent) 2. ☐ Applicant asserts small entity status. See 37 CFR 1.27 3. ☐ Applicant certifies micro entity status. See 37 CFR 1.29. Applicant must attach form PTO/SB/15A or B or equivalent. 4. ☒ Specification [Total Pages <u>30</u>] Both the claims and abstract must start on a new page. (See MPEP § 608.01(a) for information on the preferred arrangement) 5. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets <u>13</u>] 6. ☒ Inventor's Oath or Declaration [Total Pages <u>1</u>] (including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e)) a. ☐ Newly executed (original or copy) b. ☒ A copy from a prior application (37 CFR 1.63(d)) 7. ☒ Application Data Sheet * See note below. See 37 CFR 1.76 (PTO/AIA/14 or equivalent) 8. ☐ CD-ROM or CD-R in duplicate, large table, or Computer Program (Appendix) ☐ Landscape Table on CD 9. Nucleotide and/or Amino Acid Sequence Submission (if applicable, items a. – c. are required) a. ☐ Computer Readable Form (CRF) b. ☐ Specification Sequence Listing on: i. ☐ CD-ROM or CD-R (2 copies); or ii. ☐ Paper c. ☐ Statements verifying identity of above copies	ACCOMPANYING APPLICATION PAPERS 10. ☐ Assignment Papers (cover sheet & document(s)) Name of Assignee _____ 11. ☒ 37 CFR 3.73(c) Statement ☒ Power of Attorney (when there is an assignee) 12. ☐ English Translation Document (if applicable) 13. ☒ Information Disclosure Statement (PTO/SB/08 or PTO-1449) ☐ Copies of citations attached 14. ☐ Preliminary Amendment 15. ☐ Return Receipt Postcard (MPEP § 503) (Should be specifically itemized) 16. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed) 17. ☐ Nonpublication Request Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent. 18. ☐ Other: _____ _____ _____ _____ _____		
*Note: (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 must be included in an Application Data Sheet (ADS). (2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).			
19. CORRESPONDENCE ADDRESS			
☒ The address associated with Customer Number: <u>25545</u> OR ☐ Correspondence address below			
Name			
Address			
City	State	Zip Code	
Country	Telephone	Email	
Signature	/HUGH MANSFIELD/	Date	2023-02-03
Name (Print/Type)	Hugh Mansfield	Registration No. (Attorney/Agent)	55757

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor	1				Remove	
Legal Name						
Prefix	Given Name	Middle Name	Family Name	Suffix		
	VINCENT		PILON			
Residence Information (Select One) US Residency • Non US Residency Active US Military Service						
City	LACHINE	Country of Residence ⁱ		CA		
Mailing Address of Inventor:						
Address 1	850 40e AVENUE					
Address 2						
City	LACHINE	State/Province	QC			
Postal Code	H8T 2G6	Country ⁱ	CA			
All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button.						

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a).			
☐ An Address is being provided for the correspondence Information of this application.			
Customer Number	25545		
Email Address	uspatents@lavery.ca	Add Email	Remove Email
Email Address	hmansfield@lavery.ca	Add Email	Remove Email

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

Application Information:

Title of the Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		
Attorney Docket Number	G13569-00532-HM	Small Entity Status Claimed	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	13	Suggested Figure for Publication (if any)	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	☒ Customer Number	US Patent Practitioner	☐ Limited Recognition (37 CFR 11.9)
Customer Number	25545		

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending				Remove
Application Number	Continuity Type		Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)	
	Continuation of		17929566	2022-09-02	
Prior Application Status	Patented				Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
17929566	Continuation of	17010113	2020-09-02	11435542	2022-09-06
Prior Application Status	Patented				Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
17010113	Continuation of	16143831	2018-09-27	10795107	2020-10-06
Prior Application Status	Expired				Remove
Application Number	Continuity Type		Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)	
16143831	Claims benefit of provisional		62567339	2017-10-03	
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button.					Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ⁱ (if applicable)	Remove
Additional Foreign Priority Data may be generated within this form by selecting the Add button.				Add

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013. NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.			
Applicant	1		Remove
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.			
		Clear	
☐ Assignee	Legal Representative under 35 U.S.C. 117		Joint Inventor
Person to whom the inventor is obligated to assign.		Person who shows sufficient proprietary interest	
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:			
Name of the Deceased or Legally Incapacitated Inventor:			
If the Applicant is an Organization check here. ☒			
Organization Name	BELDEN CANADA ULC		
Mailing Address Information For Applicant:			
Address 1	2310 ALFRED-NOBEL		
Address 2			
City	SAINT-LAURENT	State/Province	QC
Country	CA	Postal Code	H4S 2B4
Phone Number		Fax Number	
Email Address			
Additional Applicant Data may be generated within this form by selecting the Add button. Add			

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

Assignee 1				
Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.				
				Remove
If the Assignee or Non-Applicant Assignee is an Organization check here.				☐
Prefix	Given Name	Middle Name	Family Name	Suffix
Mailing Address Information For Assignee including Non-Applicant Assignee:				
Address 1				
Address 2				
City		State/Province		
Country i		Postal Code		
Phone Number		Fax Number		
Email Address				
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.				Add

Signature:[Remove](#)

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/HUGH MANSFIELD Reg.#55757/		Date (YYYY-MM-DD)	2023-02-03
First Name	HUGH	Last Name	MANSFIELD	Registration Number
				55757
Additional Signature may be generated within this form by selecting the Add button.				Add

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	G13569-00532-HM
		Application Number	
Title of Invention	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

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Privacy Act Statement

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The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:



Practitioners associated with Customer Number:

25545

OR



Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number

Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignments documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:



The address associated with Customer Number:

25545

OR

☐	Firm or Individual Name				
	Address				
	City	State	Zip		
	Country				
	Telephone	Email			

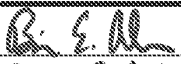
Assignee Name and Address:

Belden Canada ULC
2310 Alfred-Nobel
Saint-Laurent, Quebec Canada H4S 2B4

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be Filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

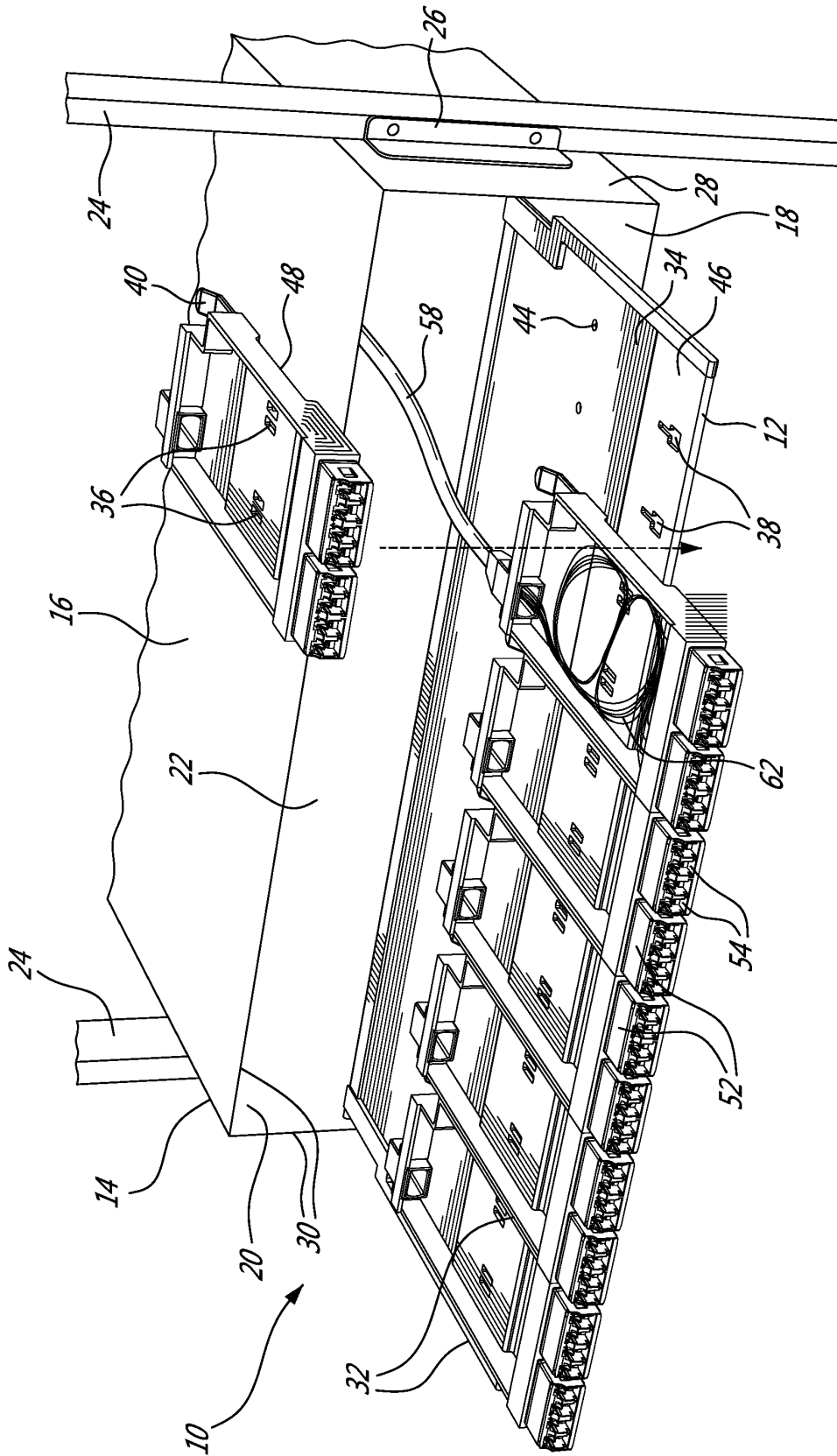
SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	August 31, 2020
Name	Brian E. Anderson	Telephone	314-854-8035
Title	Secretary		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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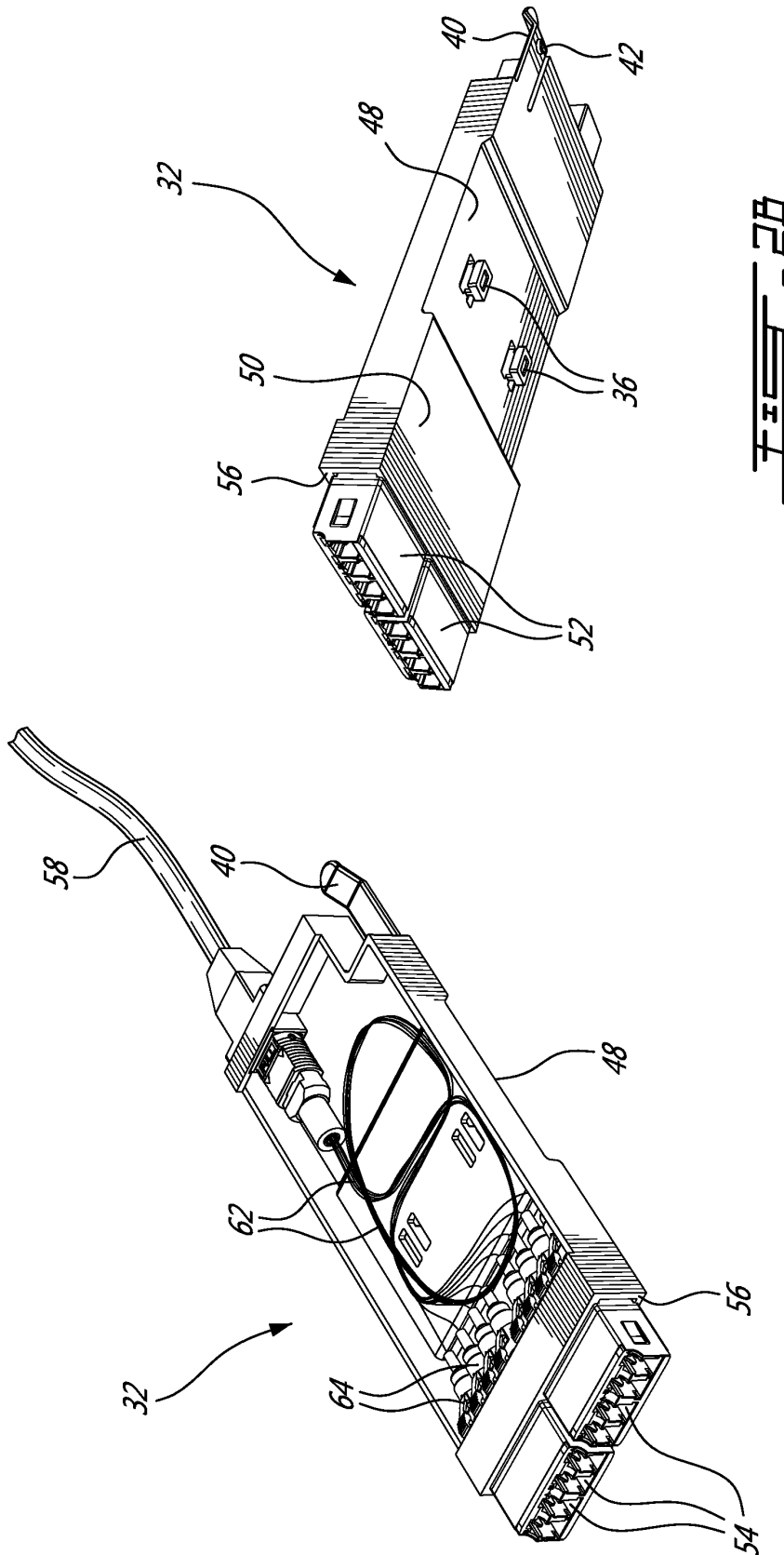
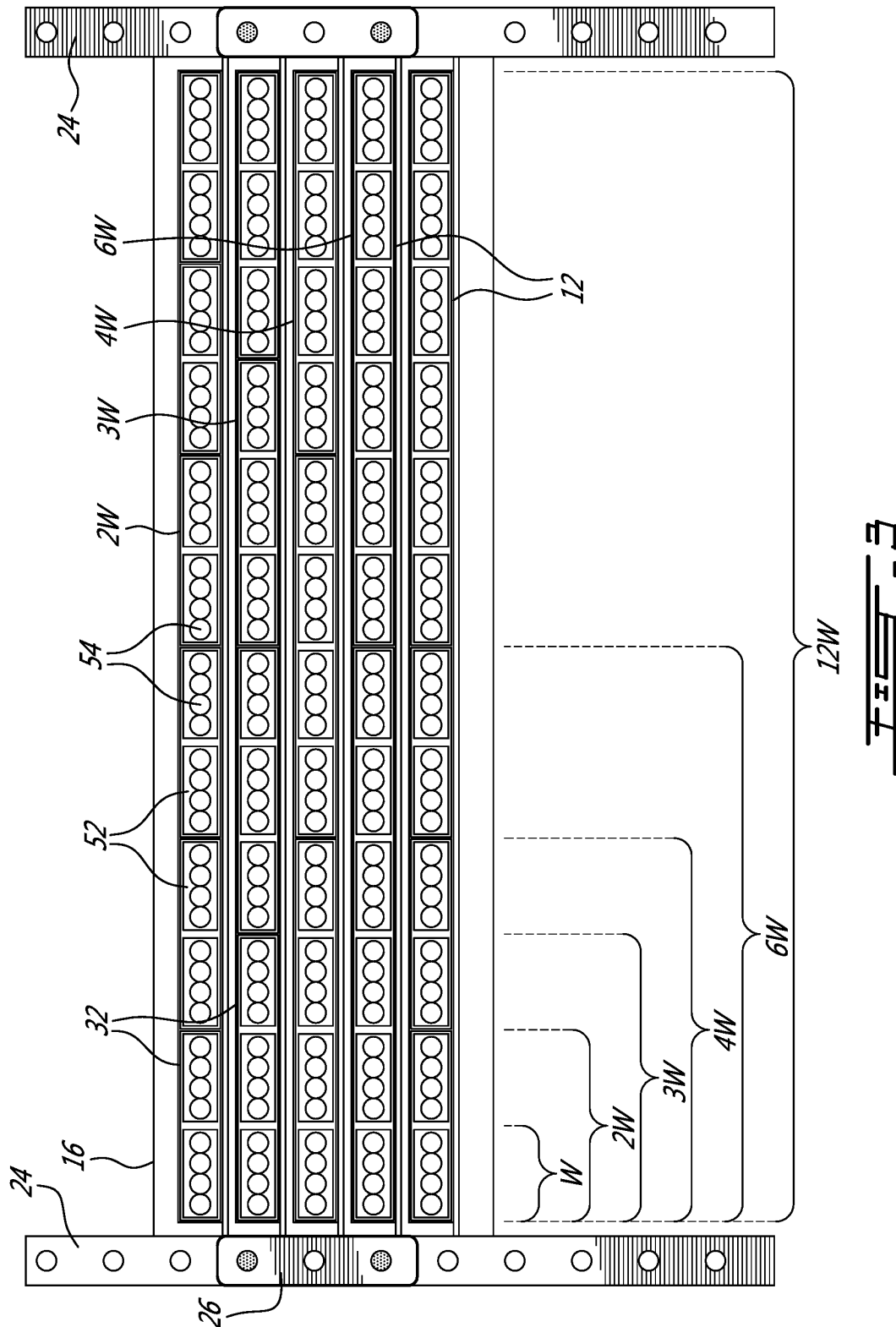


FIG. 2B

FIG. 2A



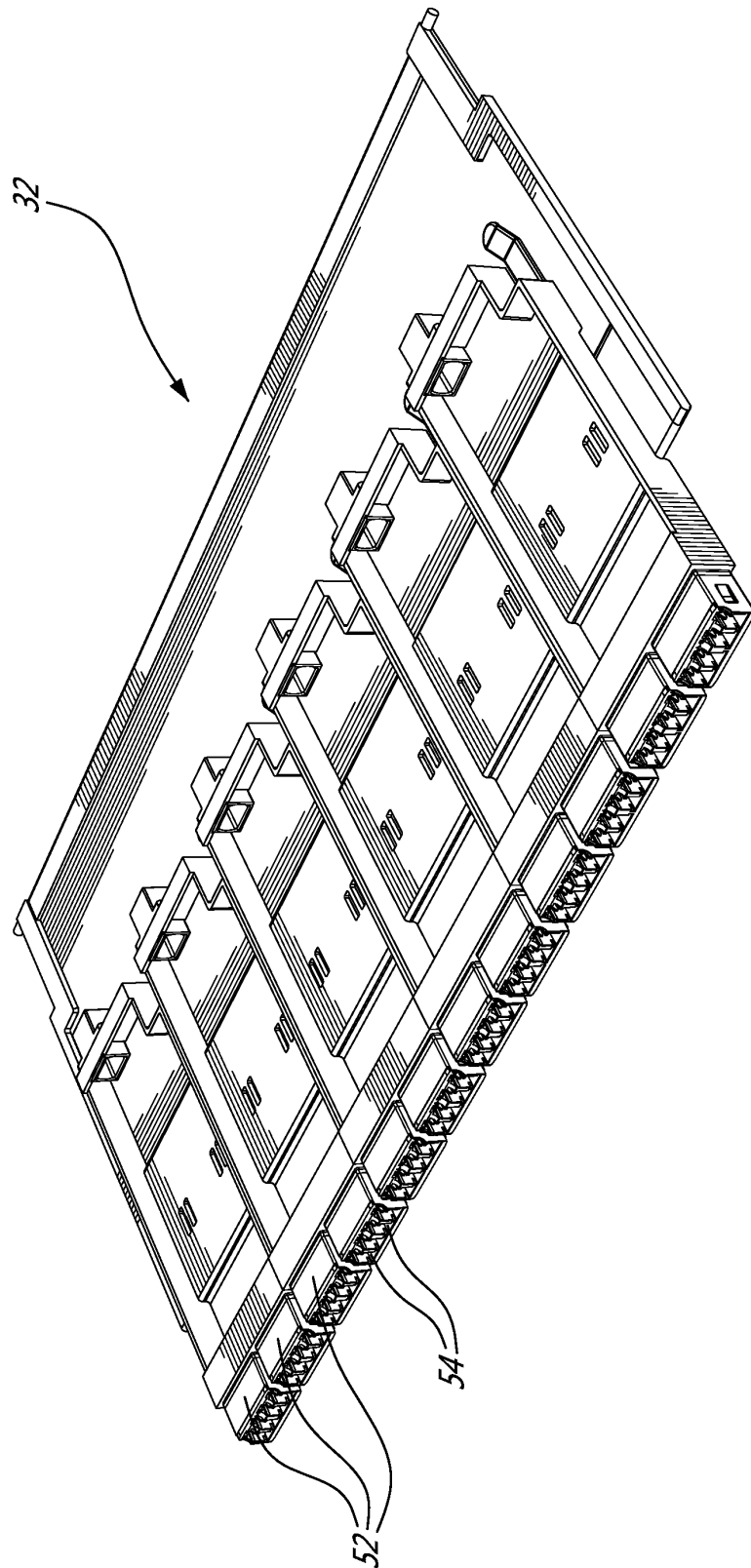


FIG. 4A

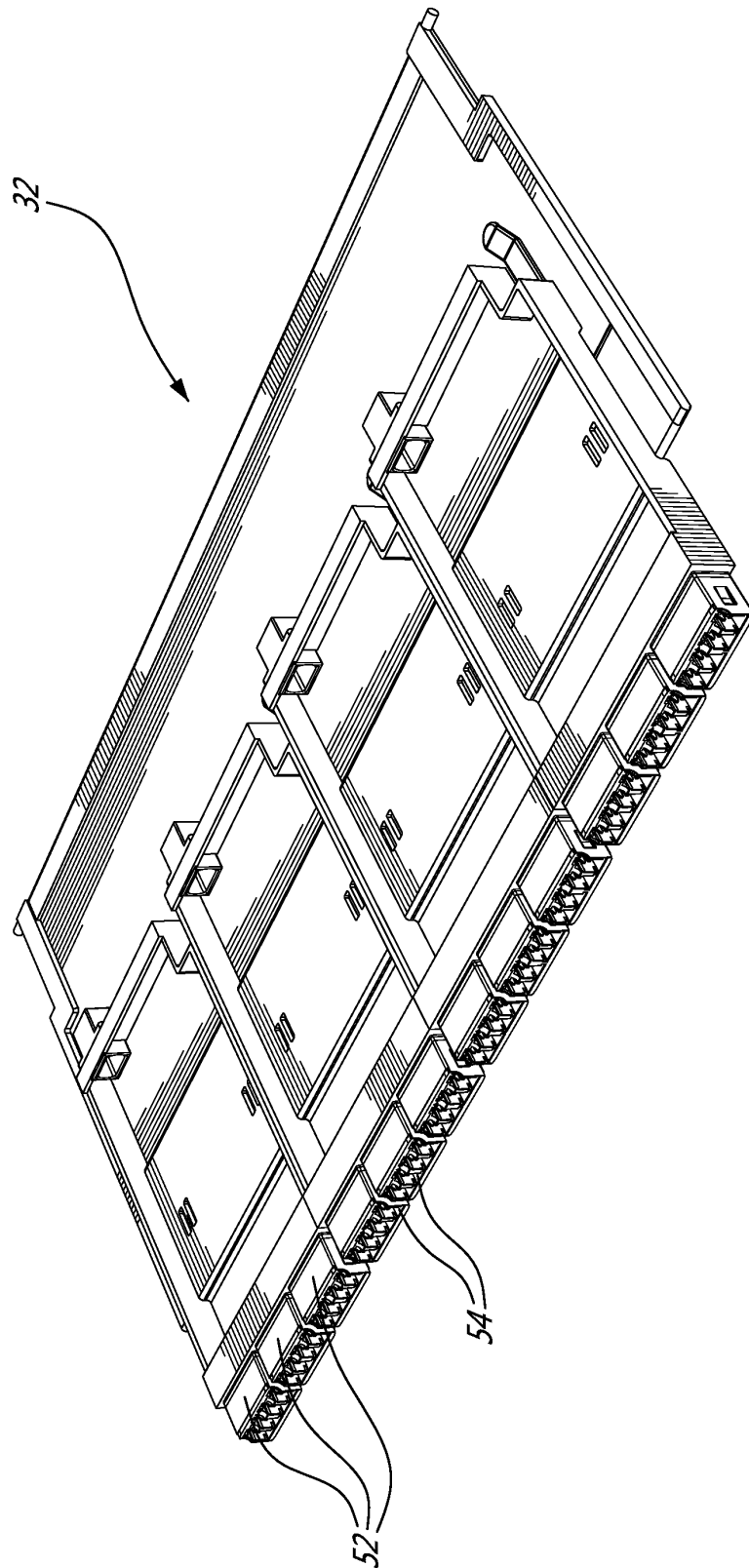


FIG. 4B

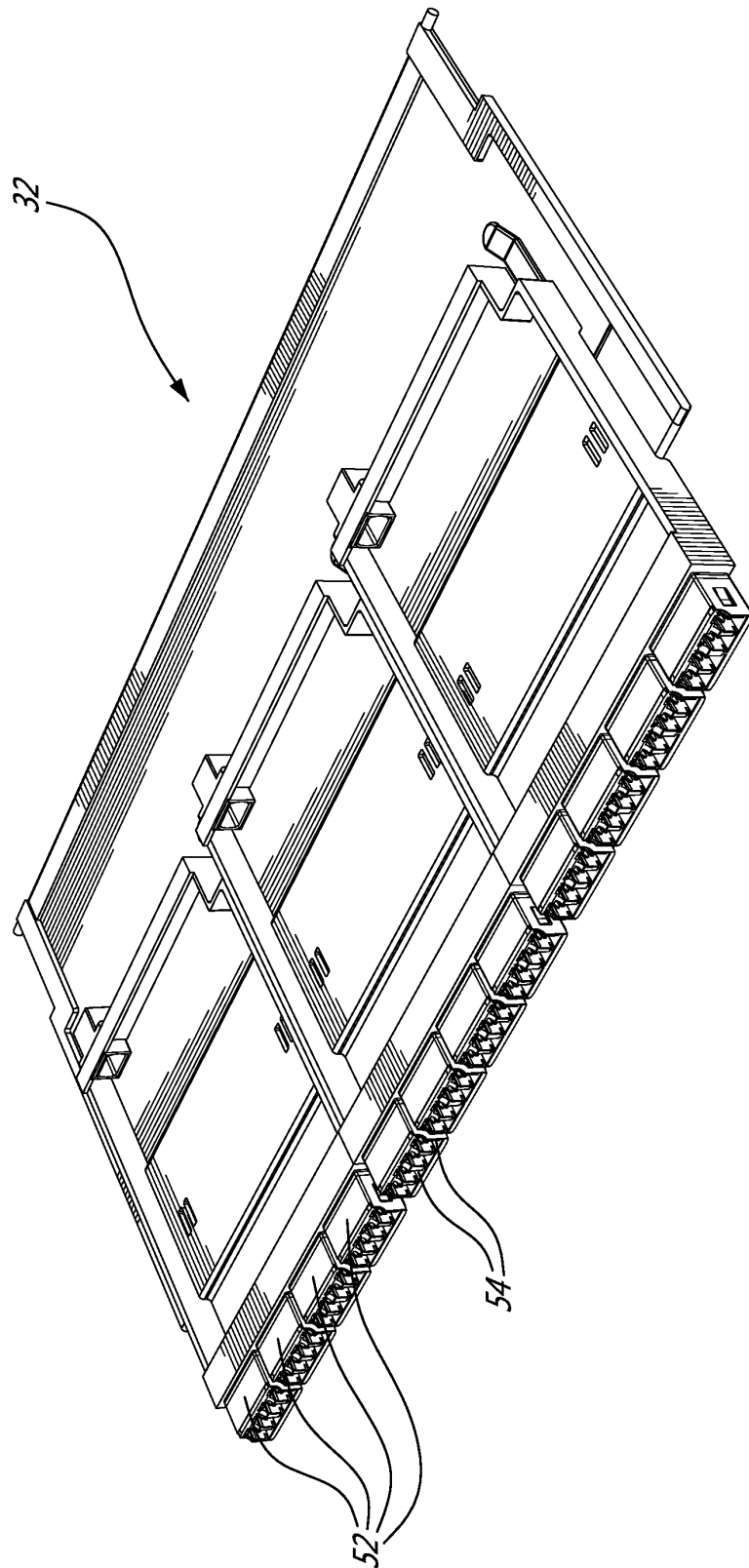


FIG. 4C

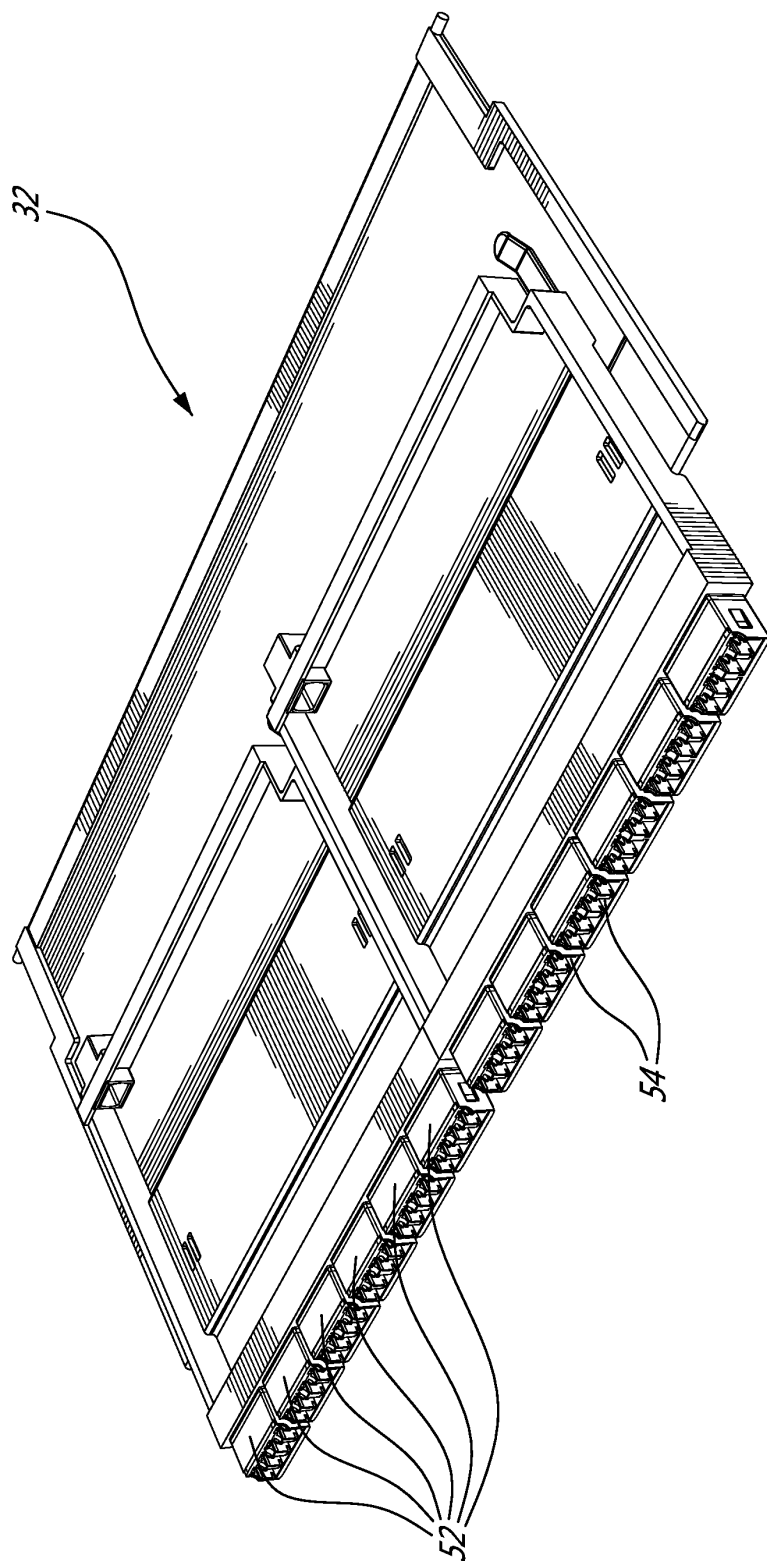
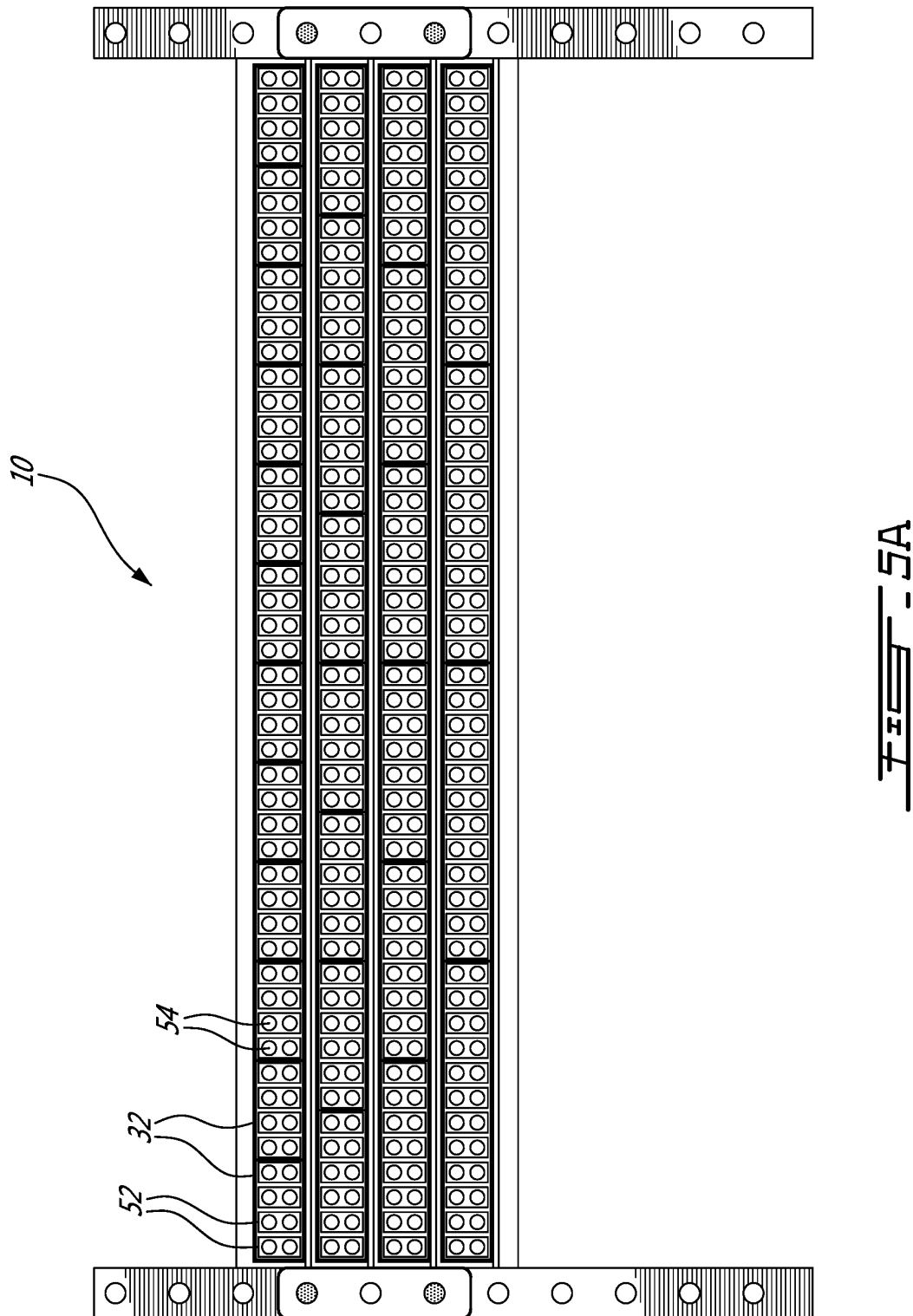
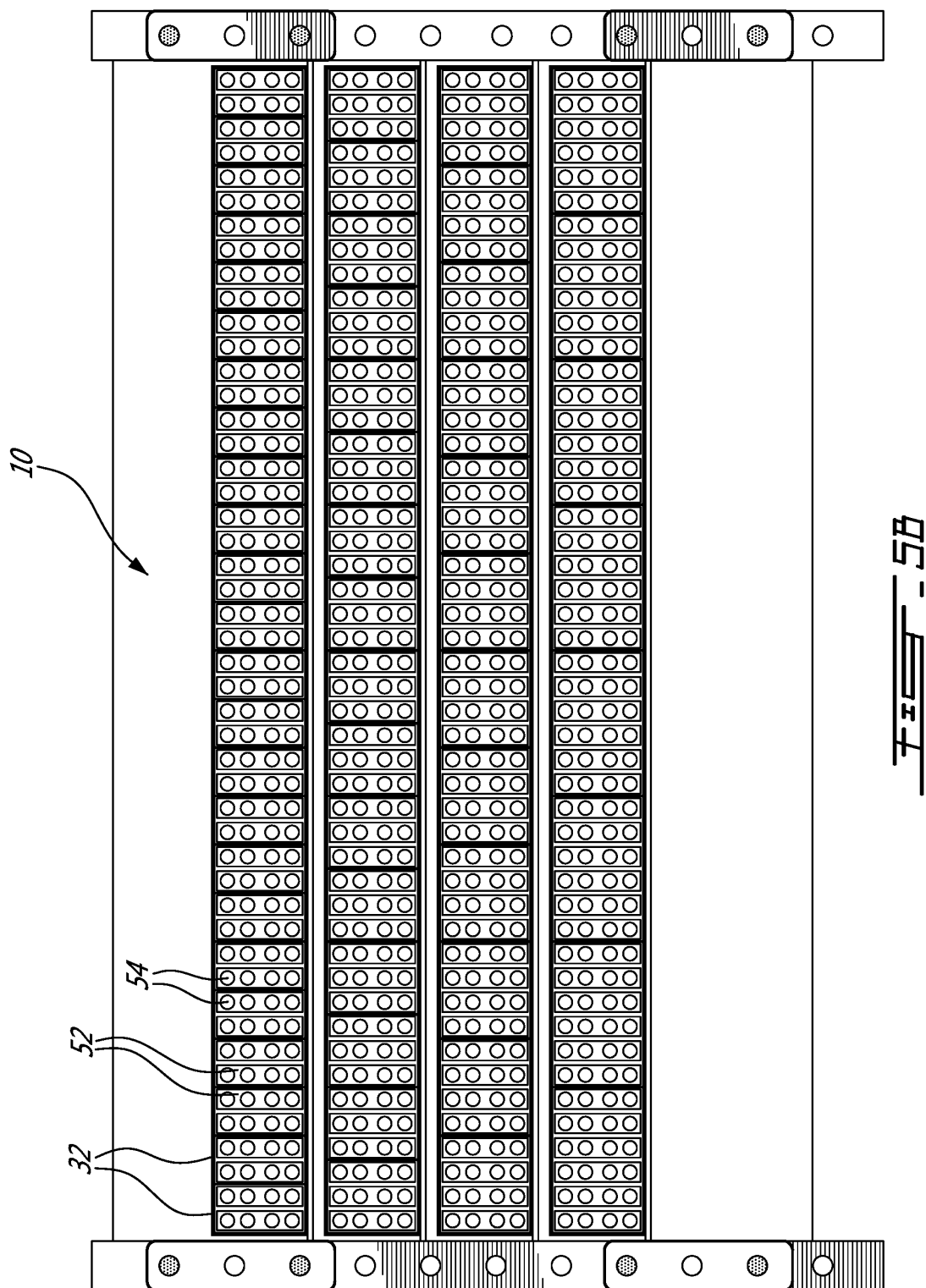
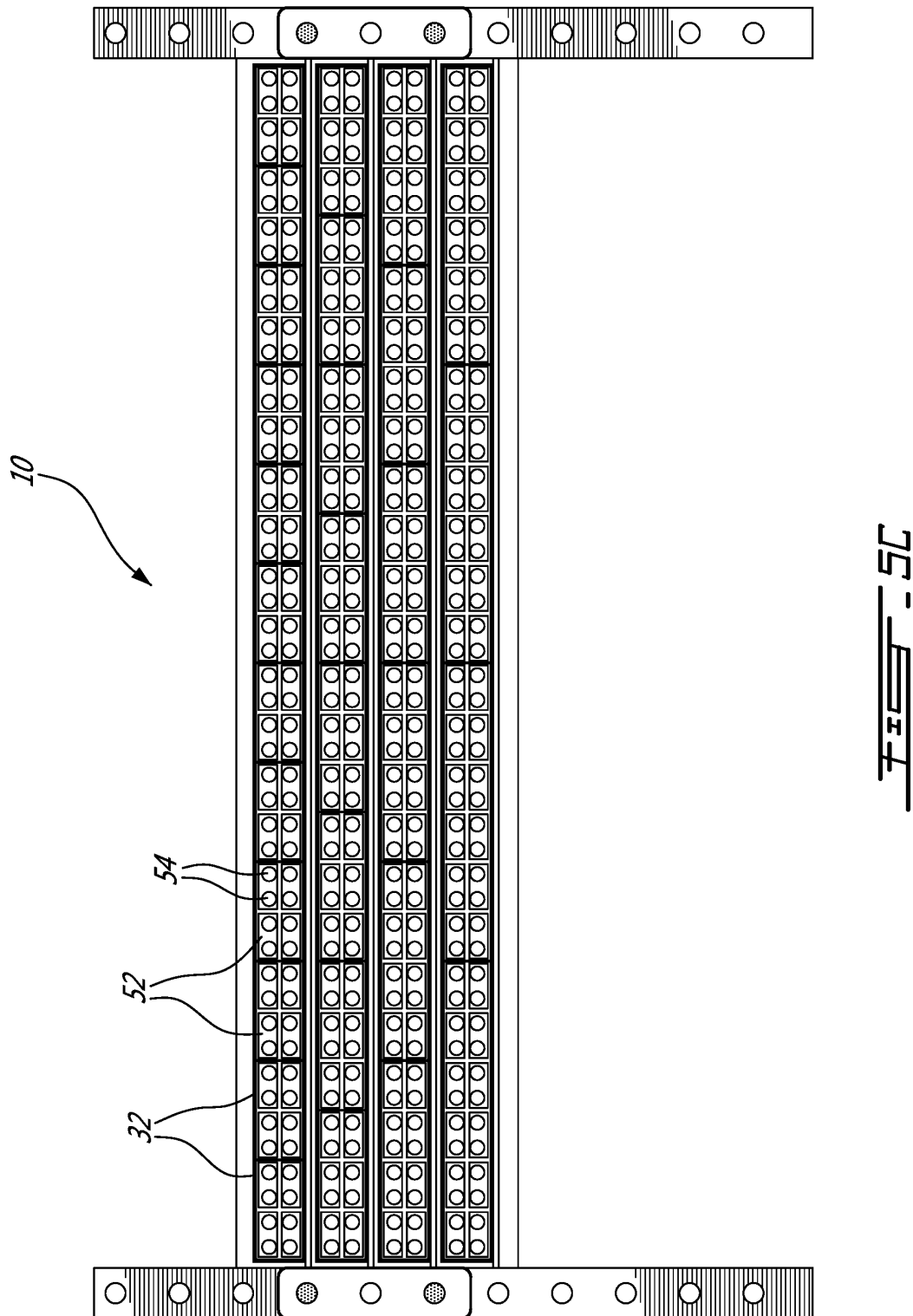


FIG. 40







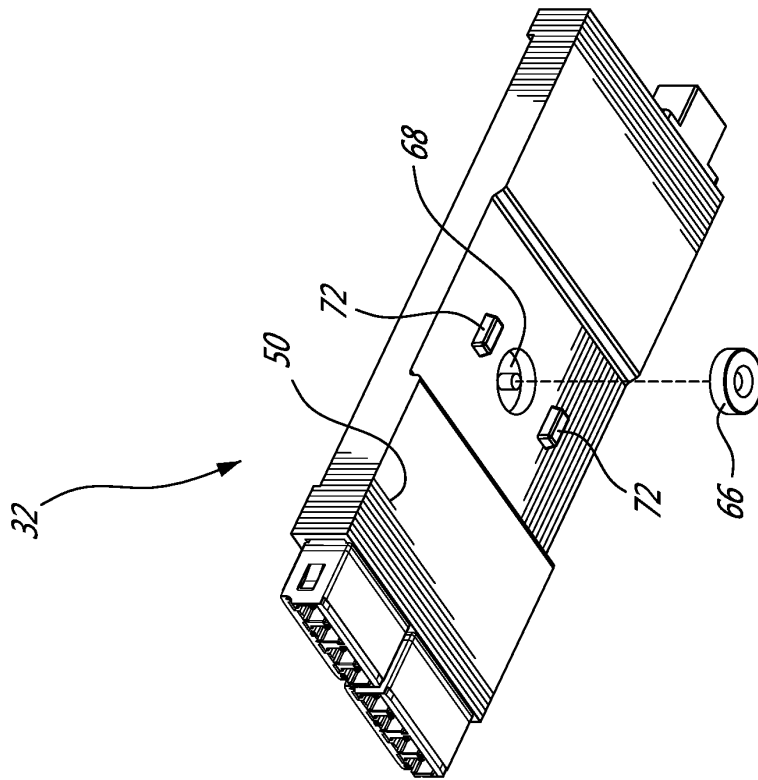


FIG. 6B

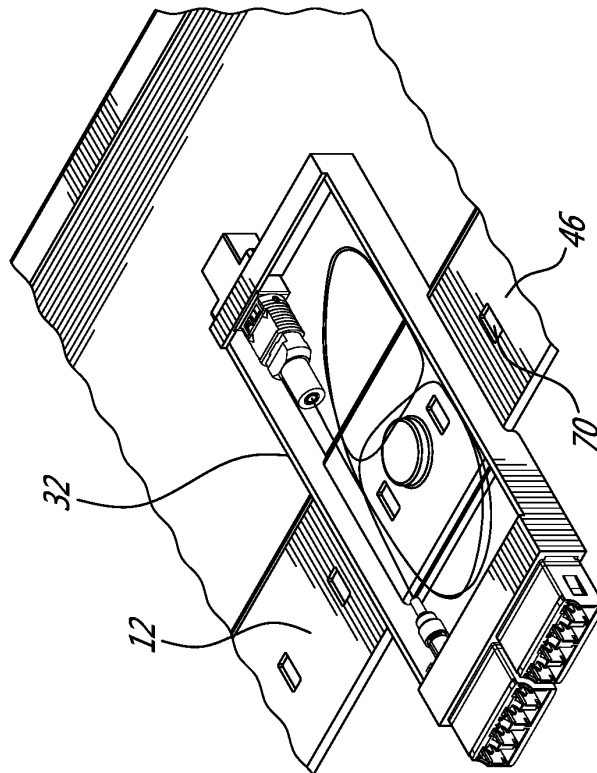


FIG. 6A

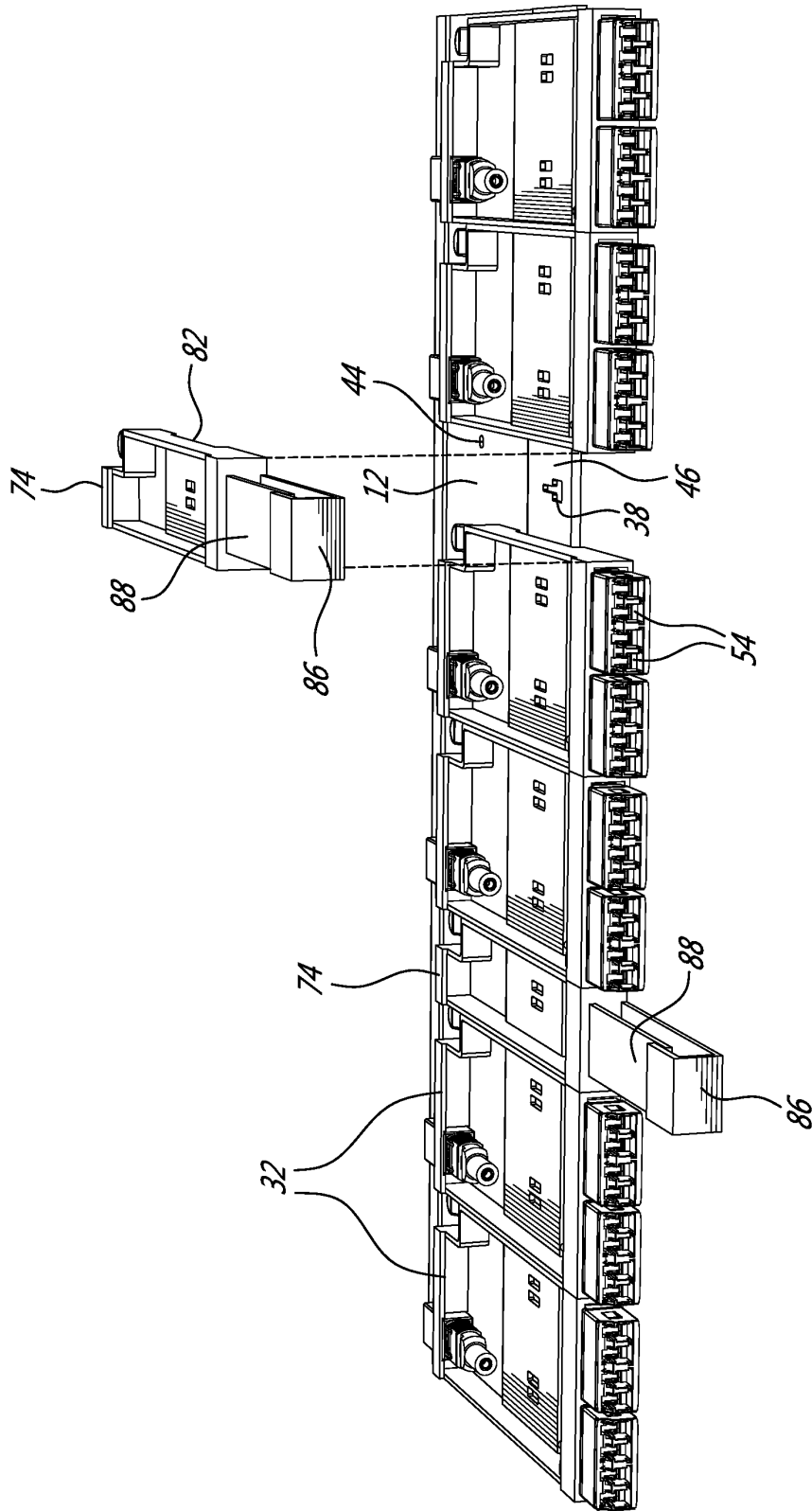


FIG. 7A

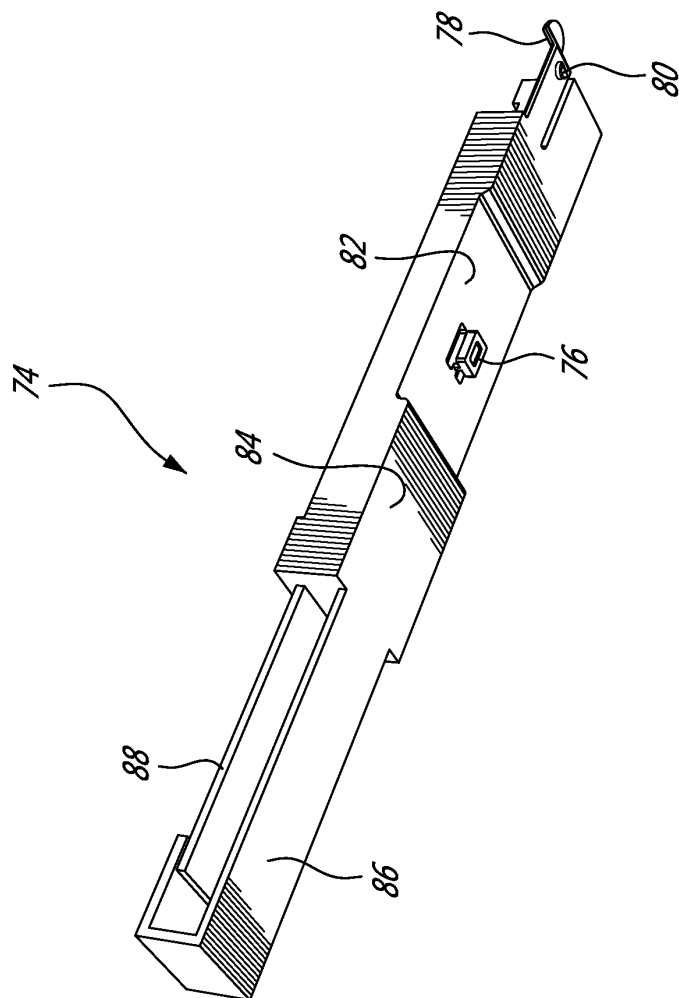


FIG. 7B

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: BELDEN CANADA ULC

Application No./Patent No.: _____ Filed/Issue Date: February 3, 2023

Titled: TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM
BELDEN CANADA ULC, a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☒ The assignee of the entire right, title, and interest.
2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):
- ☐ The extent (by percentage) of its ownership interest is ____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.
- ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

- A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
- B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Vincent PILON To: Belden Canada Inc.

The document was recorded in the United States Patent and Trademark Office at
Reel 047254, Frame 0973, or for which a copy thereof is attached.

2. From: Belden Canada Inc. To: Belden Canada ULC

The document was recorded in the United States Patent and Trademark Office at
Reel 053639, Frame 0483, or for which a copy thereof is attached.

[Page 1 of 2]

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☒ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/HUGH MANSFIELD Reg.#55757/

Signature

Hugh Mansfield

Printed or Typed Name

February 3, 2023

Date

55757

Title or Registration Number

[Page 2 of 2]

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

**CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION
UNDER 37 CFR 1.102(e) (Page 1 of 1)**

First Named Inventor:	PILON, Vincent	Nonprovisional Application Number (if known):	
Title of Invention:	TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN A FIBER OPTIC MANAGEMENT SYSTEM		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently \$0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.
2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.
3. The applicable box is checked below:
 - I. ☒ **Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)**
 - i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.
---OR---
(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.
 - ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, or the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.
 - II. ☐ **Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)**
 - i. A request for continued examination has been filed with, or prior to, this form.
 - ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
 - iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
 - iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
 - v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature /HUGH MANSFIELD Reg.#55757/	Date 2023-02-03
Name (Print/Typed) Hugh Mansfield	Practitioner Registration Number 55757
Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.*	
☐ *Total of _____ forms are submitted.	

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

TITLE OF THE INVENTION

TRAY SYSTEM FOR PROVIDING MODULAR CASSETTE CONFIGURATIONS IN
A FIBER OPTIC MANAGEMENT SYSTEM

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation application of U.S. patent application Serial No. 17/929,566 filed on September 2, 2022, which is in turn a continuation application of U.S. patent application Serial No. 17/010,113 filed on September 2, 2020, now US Patent No. 11,435,542, which is in turn a continuation application of U.S. patent application Serial No. 16/143,831 filed on September 27, 2018, now US Patent No. 10,795,107, which in turn claims priority under 35 USC §119(e) of US provisional application serial No. 62/567,339 filed on October 3, 2017. All the above documents are incorporated herein in their entirety by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to a tray system for providing modular cassette configurations in a fiber optic management system. In particular, the present invention relates to a tray for providing a plurality of modular cassette configurations in a fiber optic management system that may include a fiber optic cassette comprising a width of one or more standard width units such that fiber optic cassettes of different widths can be arranged on the same tray while optimizing the use of tray space.

BACKGROUND OF THE INVENTION

[0003] The prior art discloses fiber optic cassettes or splice boxes for use in terminating fiber optic trunk cables and splitting them out to patch cables which are

removeably arranged on tray systems within a rack mounted case. One drawback of these cassettes and tray systems is that they are typically preconfigured to terminate fiber optic cables comprising a single predetermined number of optic fibers. Another drawback is that cassettes which are used to terminate fiber optic cables comprising different numbers of optic fibers are generally incompatible with one another and additionally require trays with different spacing, securing mechanisms and the like.

SUMMARY OF THE INVENTION

[0004] According to various exemplary embodiments of the disclosure, a tray for providing a plurality of different modular fiber optic cassette configurations in a standard U-space fiber optic management system may comprise a tray having a first tray side end portion and a second tray side end portion defining a tray width portion extending between the first tray side end portion and the second tray side end portion. The tray width portion may fit within a standard U-space width dimension and the tray is configured to fit a plurality of different modular fiber optic cassette configurations in the tray width portion in a standard U-space fiber management system. Each of the plurality of different modular fiber optic cassette configurations may include a modular fiber optic cassette that is configured to support a receptable module having a first module side end portion and a second module side end portion defining a module width portion extending between the first tray side end portion and second tray side end portion. The module width portion may be configured to fit in a standard one width (1W) unit. Each of the modular fiber optic cassettes may include a first cassette side end portion and a second cassette side end portion defining a standard cassette width unit extending between the first cassette side end portion and the second cassette side end portion that comprises a standard two width (2W) unit, a standard three width (3W) unit, a standard four width (4W) unit, or a standard a standard six width (6W) unit relative to the standard one width (1W) unit. The receptable module is configured to fit at least four fiber

optic plug receiving receptacle portions in a standard one width (1W) unit. The plurality of different modular fiber optic cassette configurations may comprise a first modular fiber optic cassette configuration that may include six modular two standard width unit (2W) cassettes that are each arranged side by side of each other along the tray such that a cassette side end portion of each modular two standard width (2W) cassette adjacently faces a cassette side end portion of at least one other modular two standard width (2W) cassette, a second modular fiber optic cassette configuration that may include four modular three standard width unit (3W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular three standard width (3W) cassette adjacently faces a cassette side end portion of at least one other modular three standard width (3W) cassette, a third modular fiber optic cassette configuration that may include three modular four standard width unit (4W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular four standard width (4W) cassette adjacently faces a cassette side end portion of at least one other modular four standard width (4W) cassette, a fourth modular fiber optic cassette configuration that may include two modular six standard width unit (6W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the two modular six standard width (6W) cassettes adjacently faces a cassette side end portion of the other modular six standard width (6W) cassette, and a fifth modular fiber optic cassette configuration that may include three modular two standard width unit (2W) cassettes, which are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the three modular two standard width (2W) cassettes adjacently faces a cassette side end portion of one of the other modular two standard width (2W) cassette, and one modular six standard width unit (6W) cassette that is arranged side by side in a row along the tray with one of the three modular two standard width unit (2W) cassettes, such that a cassette side end portion of the one modular six standard width unit (6W) cassette may adjacently face a cassette side end portion of one of the other

three modular two standard width unit (2W) cassettes. Each modular two standard width (2W) cassette may be configured to fit two receptacle modules, each modular three standard width (3W) cassette may be configured to fit three receptacle modules, each modular four standard width (4W) cassette may be configured to fit four receptacle modules, and each modular six standard width (6W) cassette is configured to fit six receptacle modules. The tray may be configured to be removably secured to each modular fiber optic cassette when the tray fits the plurality of different modular fiber optic cassette configurations within the tray width portion in the standard U-space fiber management system. The tray also may include a plurality of cassette engaging portions that are configured to conform to the standard one width (1W) so as to support the modular two standard width (2W) cassette, the modular three standard width (3W) cassette, the modular four standard width (4W) cassette, and/or the modular six standard width (6W) cassette.

[0005] In some exemplary and non-limiting aspects, the standard one width (1W) unit is based on a standard SC Duplex width unit that may be configured to fit a plurality of different type of LC, SC, and MPO connectors. According to some other exemplary and non-limiting aspects, the plurality of cassette engaging portions of the tray may be spaced apart from one another so as to conform to the standard one width (1W) and support the modular two standard width (2W) cassette, the modular three standard width (3W) cassette, the modular four standard width (4W) cassette, and the modular six standard width (6W) cassette.

[0006] In various exemplary and non-limiting aspects, the tray may be configured to be slidably received in at least a portion of a tray receiving space of a case of a fiber optic management system. In some other exemplary and non-limiting aspects, each of the modular fiber optic cassettes may include a cassette side end portion that is directly adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations. In some other

exemplary and non-limiting aspects, each of the modular fiber optic cassettes may include a cassette side end portion that may be located adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.

[0007] In some exemplary and non-limiting aspects, each of the modular fiber optic cassettes may include a cassette side end portion that touches a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations. In some other exemplary and non-limiting aspects, the tray may have a first tray end portion and a second tray end portion that may be spaced away from the first tray end portion so as to define a tray width that may extend between the first tray end portion and the second tray end portion, and wherein the tray width may be configured to fit at least twelve standard one width (1W) units side by side along the tray width.

[0008] In accordance with various exemplary and non-limiting embodiments of the disclosure, a tray for providing a plurality of different modular fiber optic cassette configurations in a standard U-space fiber optic management system may comprise a tray configured to fit in a standard U-space and support a plurality of different modular fiber optic cassette configurations in the standard U-space. Each of the plurality of different modular fiber optic cassette configurations may include a plurality of different sizes of modular fiber optic cassettes. Each of the plurality of different sizes of modular fiber optic cassettes may be configured to support a fiber optic receptable module that is configured to fit in a standard one width (1W) unit. The plurality of different sizes of modular fiber optic cassettes may include a 2W cassette size that is configured to fit a standard two width (2W) unit relative to the standard one width (1W) unit, a 3W cassette size that may be configured to fit a standard three width (3W) unit relative to the standard one width (1W) unit, a 4W

cassette size that may be configured to fit a standard four width (4W) unit relative to the standard one width (1W) unit, and a 6W cassette size that may be configured to fit a standard six width (6W) unit relative to the standard one width (1W) unit. The plurality of different modular fiber optic cassette configurations may comprise a first modular fiber optic cassette configuration that may include six modular 2W standard width unit size cassettes that may each be arranged side by side of each other along the tray such that a cassette side end portion of each modular 2W standard width unit size cassette may adjacently face a cassette side end portion of at least one other modular 2W standard width size cassette, a second modular fiber optic cassette configuration that may include four modular 3W standard width unit size cassettes that may each be arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular 3W standard width size cassette may adjacently face a cassette side end portion of at least one other modular 3W standard width size cassette, a third modular fiber optic cassette configuration that may include three modular 4W standard width unit size cassettes that may each be arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular 4W standard width size cassette may adjacently face a cassette side end portion of at least one other modular 4W standard width size cassette, a fourth modular fiber optic cassette configuration that may include two modular 6W standard width unit size cassettes that may each be arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the two modular 6W standard width size cassettes may adjacently face a cassette side end portion of the other modular 6W standard width size cassette, and a fifth modular fiber optic cassette configuration that may include three modular 2W standard width unit size cassettes, which may each be arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the three modular 2W standard width size cassettes may adjacently face a cassette side end portion of one of the other modular 2W standard width size cassette, and one modular 6W standard width unit size cassette that may be arranged side by side in a row along the tray with one of the three modular 2W

standard width unit size cassettes, such that a cassette side end portion of the one modular 6W standard width unit size cassette may adjacently face a cassette side end portion of one of the other three modular 2W standard width unit size cassettes. The tray may be configured to be removably secured to each modular fiber optic cassette when the tray fits the plurality of different modular fiber optic cassette configurations within a tray width portion in the standard U-space fiber management system and the tray may include a plurality of cassette engaging portions that may be configured to conform to the standard one width (1W) so as to support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and the modular 6W standard width unit size cassette.

[0009] In various aspects, the standard one width (1W) unit may be based on a standard SC Duplex width unit that may be configured to fit a plurality of different type of LC, SC, and MPO connectors.

[0010] According to some aspects, the plurality of cassette engaging portions of the tray may be spaced apart from one another so as to conform to the standard one width (1W) and support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and/or the modular 6W standard width unit size cassette. In some aspects, the tray may be configured to be slidingly received in at least portion of a tray receiving space of a case of a fiber optic management system.

[0011] According to some aspects, each of the modular fiber optic cassettes may include a cassette side end portion that may be located directly adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations. In some aspects, each of the modular fiber optic cassettes may include a cassette side end portion that is adjacent to a cassette side

end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations. In some aspects, each of the modular fiber optic cassettes may include a cassette side end portion that touches a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.

[0012] In various aspects, the tray may have a first tray end portion and a second tray end portion that may be spaced away from the first tray end portion so as to define a tray width that may extend between the first tray end portion and the second tray end portion, and wherein the tray width may be configured to support at least twelve standard one width (1W) units side by side along the tray.

[0013] In accordance with various exemplary embodiments of the disclosure, a tray for providing a plurality of different modular fiber optic cassette configurations in a fiber optic management system may comprise a tray member that may be configured to support a plurality of different modular fiber optic cassette configurations in a standard U-space width. The plurality of different modular fiber optic cassette configurations may include different sizes of modular fiber optic cassettes. Each of the different sizes of modular fiber optic cassettes may be configured to support a fiber optic receptable module that may be configured to fit in a standard one width (1W) unit. The plurality of different sizes of modular fiber optic cassettes may include a 2W cassette size that may be configured to fit a standard two width (2W) unit relative to the standard one width (1W) unit, a 3W cassette size that may be configured to fit a standard three width (3W) unit relative to the standard one width (1W) unit, a 4W cassette size that may be configured to fit a standard four width (4W) unit relative to the standard one width (1W) unit, and a 6W cassette size that may be configured to fit a standard six width (6W) unit relative to the standard one width (1W) unit. The plurality of different modular fiber

optic cassette configurations may comprise a first modular fiber optic cassette configuration that may include six modular 2W standard width unit size cassettes that each may be arranged side by side of each other along the tray member such that a cassette side end portion of each modular 2W standard width unit size cassette adjacently faces a cassette side end portion of at least one other modular 2W standard width size cassette, a second modular fiber optic cassette configuration that may include four modular 3W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of each modular 3W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 3W standard width size cassette, a third modular fiber optic cassette configuration that may include three modular 4W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of each modular 4W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 4W standard width size cassette, and/or a fourth modular fiber optic cassette configuration that may include two modular 6W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of one of the two modular 6W standard width size cassettes adjacently faces a cassette side end portion of the other modular 6W standard width size cassette. The tray member may be configured to conform to the standard one width (1W) so as to support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and the modular 6W standard width unit size cassette.

[0014] In some aspects, the standard one width (1W) unit may be based on a standard SC Duplex width unit that may be configured to fit a plurality of different type of LC, SC, and MPO connectors. In some aspects, the tray member may include a row of cassette engaging portions that may be spaced apart from one

another so as to conform to the standard one width (1W) and support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and the modular 6W standard width unit size cassette.

[0015] In various aspects, the row of cassette engaging portions may comprise a first row of cassette engaging portions, and the tray may include a second row of cassette engaging portions that may be spaced away from the first row of cassette engaging portions. In some aspects, the first row of cassette engaging portion may comprise a first row of slot portions that each may be configured to engage a tab portion of each modular cassette. In some aspects, the tray member may be configured to be slidably received in at least portion of a tray member receiving space of a case of a fiber optic management system.

[0016] In some aspects, each of the modular fiber optic cassettes may include a cassette side end portion that may be located directly adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations. In accordance with some aspects, each of the modular fiber optic cassettes may include a cassette side end portion that may be adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.

[0017] In accordance with some aspects, each of the modular fiber optic cassettes may include a cassette side end portion that may touch a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations. In some aspects, the tray member may have a tray member width that may be configured to support at least twelve standard one width (1W) units side

by side along a row. In some aspects, the tray member may have a first tray member end portion and a second tray member end portion that may be spaced away from the first tray member end portion so as to define a tray member width that may extend between the first tray member end portion and the second tray member end portion, and wherein the tray member width may be configured to support at least twelve standard one width (1W) units side by side along the tray member.

[0018] According to some aspects each of the modular fiber optic cassettes may comprise a multi-fiber connector receiving receptacle portion arranged on a rear portion thereof. In some aspects, each of the modules fiber optic cassettes may comprise four fiber optic plug receiving receptacle portions that may be configured to be arranged side by side in a row along a front portion thereof for each standard width (1W) unit. In some aspects, the tray member may comprise a cassette fastening portion that may be configured to removably secure the tray member to each modular fiber optic cassette.

[0019] The foregoing and other features of construction and operation of the invention will be more readily understood and fully appreciated from the following detailed disclosure, taken in conjunction with accompanying drawings. Throughout the description, like reference numerals will refer to like parts in the various embodiments and drawing figures.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020] Figure 1 provides a right front perspective view of a modular fiber optic cassette and system mounted in a rack and in accordance with an illustrative embodiment of the present invention;

[0021] Figures 2A and 2B provide respectively a raised right front perspective view and a lowered right front perspective view of a modular fiber optic cassette in

accordance with an illustrative embodiment of the present invention;

[0022] Figure 3 provides a front plan view of a modular fiber optic cassette system mounted in a rack in accordance with an illustrative embodiment of the present invention;

[0023] Figures 4A through 4D provide raised right front perspective views of a tray populated with respectively six (6), four (4), three (3) and two (2) cassettes of different widths;

[0024] Figure 5A, 5B and 5C provide front plan views of a modular fiber optic cassette and system mounted in a rack respectively in accordance with first, second and third alternative embodiments of the present invention;

[0025] Figures 6A and 6B provide respectively a raised right front perspective view and a lowered right front perspective view of a modular fiber optic cassette in accordance with an alternative illustrative embodiment of the present invention; and

[0026] Figures 7A and 7B provide respectively a raised right front perspective view of a tray comprising a plurality modular fiber optic cassettes and a pair of cable management brackets and lowered right front perspective view of a cable management bracket in accordance with a second alternative illustrative embodiment of the present invention.

DETAILED DESCRIPTION OF THE ILLUSTRATIVE EMBODIMENTS

[0027] Referring now to Figure 1, a modular cassette system, generally referred to using the reference numeral 10, will now be described. The modular cassette comprises a slideable tray 12 illustratively mounted within a case 14. The case 14 comprises a top wall 16, a bottom wall 18 and a pair of opposed side walls 20

defining a tray receiving space 22 therebetween. The case 14 is illustratively mounted to the rails 24 of a rack via a pair of mounting brackets 26 wherein one of the brackets 26 is attached to an outer surface 28 of a respective one of the sidewalls 20. The front edges 30 of the walls 16, 18, 20 define an opening via which the tray receiving space 22 can be accessed. In a particular illustrated embodiment the system 10 is shown for mounting in a 19" rack, however in a particular embodiment the system 10, with suitable modifications, may be mounted equally in a cross connect system, fiber bay or wall mount or the like.

[0028] Referring to Figures 2A and 2B in addition to Figure 1, the tray 12 receives a plurality of removable fiber optic module or cassettes 32 arranged side by side on an upper surface 34 thereof. In a first embodiment each fiber optic cassette 32 is secured to the tray 12 using a fastener comprising tabs 36 of inverted "T" cross section which engage with respective slots 38 machined or otherwise formed in the tray 12. A flexible tab 40 is also provided which comprises a boss 42 that engages a respective aperture 44 machined or otherwise formed in the tray 12 when the tabs 36 are engaged within their respective slots 38, thereby releasably securing the cassette 32 to the tray 12. In order to better orient the cassette 32 on the tray during installation, the tray 12 comprises a raised shoulder 46 which is received within a channel 48 moulded or otherwise formed in an underside 50 of the cassette 32.

[0029] Still referring to Figures 2A and 2B, each cassette 32 illustratively comprises a plurality of receptacle modules 52 each comprising a plurality of receptacles 54, illustratively LC Quad type receptacles, arranged in a row and exposed along a forward edge 56 of the cassette 32. The cassette 32 also illustratively terminates a fiber optic cable 58, such as a trunk cable or the like, comprising a plurality of optic fibers at a multi-fiber connector receiving receptacle 60 on a rearward edge. Each optic fiber of the fiber optic cable 58 is interconnected with a respective one of the receptacles 54 using an optic fiber segment 62 comprising a receptacle end which is terminated by a plug 64. The segments 62, which are typically longer than the

distance between the forward edge and the rearward edge, are typically looped several times within the cassette 32, for example in a serpentine or the like. A person of ordinary skill in the art will understand that an optic fiber terminated with a plug (not shown) inserted into a selected one of the receptacles 54 will interconnect the optic fiber with a selected optic fiber segment 62.

[0030] Referring now to Figure 3 and Figures 4A through 4D, as discussed above, each cassette 32 illustratively comprises a plurality of receptacle modules 52 each comprising four (4) receptacles 54. It is foreseen to provide a set of four (4) different cassette sizes to accommodate terminating fiber optic cables comprising different number of optic fibers. Each of the different cassette sizes of the set is based on an integer multiple of a standardised pitch or width unit W wherein one standardized width unit accommodates a single receptacle module 52 comprising four (4) receptacles 54. Illustratively, a 2W cassette 32 comprising two (2) modules 52 accommodating eight (8) optic fibers (Figure 4A) is provided, a 3W cassette 32 comprising three (3) modules 52 accommodating twelve (12) optic fibers (Figure 4B) is provided, a 4W cassette 32 comprising four (4) modules 52 accommodating sixteen (16) optic fibers (Figure 4C) is provided and a 6W cassette 32 comprising six (6) modules 52 accommodating twenty-four (24) optic fibers (Figure 4D) is provided for. The 2W, 3W, 4W and 6W cassettes 32 are typically used only with like cassettes 32 as illustrated and such that respectively six (6), four (4), three (3) and two (2) cassettes fit snugly side by side on the 12W tray, although in a particular embodiment cassettes 32 of different widths could be used together.

[0031] Although the present illustrative embodiment In a particular embodiment the pitch/width W is based on a LC Quad (SC Duplex) technology footprint comprising four (4) connectors, in an alternative embodiment the pitch/width W could be based on a different technology footprint, including SC Duplex comprising two (2) connectors and MPO type connectors comprising *inter alia* multiple optic fibers such as MPO-12, MPO-16 and MPO-24.

[0032] Still referring to Figures 3, 4A through 4D in addition to Figure 1, a person of ordinary skill in the art will now understand that the disclosed system of cassettes 32 can be used to accommodate optic fiber cables 58 comprising different numbers of optic fibers 62 while ensuring that the same number of optic fibers 62 are accessible via the exposed receptacles 54.

[0033] Referring back to Figure 1, the spacing between adjacent slots 38 as well as the spacing between adjacent apertures 44 conforms to the standardised width unit W and such that the $2W$, $3W$, $4W$ and $6W$ cassettes 32 can be readily accommodated on the tray.

[0034] Referring now to Figure 5A, in a first alternative embodiment of the system each receptacle modules 52 comprises a duplex type module arranged vertically. Additionally in a first cassette size four (4) of such duplex modules 52 are provided to provide for eight (8) receptacles 54 for terminating a fiber optic cable (not shown) comprised of eight (8) optic fibers. Similar to the first embodiment discussed above, sizes for twelve (12), sixteen (16) and twenty four (24) receptacles are also provided. Again, as the width of the cassettes is an integer multiple of the same pitch/width, cassettes of different widths can be used in the same tray system or in some cases on the same tray without modification or changing the density of the receptacles 54 for terminating optic fibres.

[0035] Referring now to Figure 5B, in a second alternative embodiment of the system each receptacle modules 52 comprises a Quad type module arranged vertically. In a first cassette size two (2) of such quad modules 52 are provided to provide for eight (8) receptacles 54 for terminating a fiber optic cable (not shown) comprised of eight (8) optic fibers. Cassettes comprising three (3), four (4) and six (6) quad type modules 52 are provided to provide respectively twelve (12), sixteen (16) and twenty-four (24) receptacles. Again, as the width of the cassettes is an

integer multiple of the same pitch/width, cassettes of different widths can be used in the same tray system or in some cases on the same tray without modification or changing the density of the receptacles 54 for terminating optic fibres.

[0036] Referring now to Figure 5C, in a third alternative embodiment of the system each receptacle modules 52 comprises a duplex type module arranged horizontally in two rows. In a first cassette size four (4) of such duplex modules 52 are provided to provide for eight (8) receptacles 54 for terminating a fiber optic cable (not shown) comprised of eight (8) optic fibers. Cassettes comprising six (6), eight (8) and twelve (12) duplex type modules 52 are provided to provide respectively twelve (12), sixteen (16) and twenty-four (24) receptacles. Again, as the width of the cassettes is an integer multiple of the same pitch/width, cassettes of different widths can be used in the same tray system or in some cases on the same tray without modification or changing the density of the receptacles 54 for terminating optic fibres.

[0037] Referring now to Figures 6A and 6B in addition to Figure 1, in an alternative embodiment of an assembly for securing the cassettes 32 to the tray 12 the tray 12 is manufactured from a ferrous material such as steel or the like and the fastener comprises a magnet 66 which is attracted to the tray and embedded or otherwise secured within a recess 68 formed in the underside 50 of the cassette 32. The tray 12, further comprises a series of spaced slots 70 arranged along the raised shoulder 46 which engage bosses 72 to ensure correct positioning of the cassettes 32 on the tray 12.

[0038] Referring now to Figure 7A in a second alternative illustrative embodiment other equipment, such as a cable management bracket 74 can be provided with the same width W and such that they can be mounted to together with the cassettes 32 to the tray 12. In this regard, and with reference to Figure 7B in addition to Figure 7, the cable management bracket 74 is provided with tabs 76 comprising an inverted "T" cross section which engage with engage a slot 38 on the tray 12. A flexible tab

78 is provided which comprises a boss 80 that engages one of the apertures 44 in the tray 12 when the tab 76 is engaged within its respective slot 38, thereby releasably securing the cable management bracket 74 to the tray 12. In order to better orient the cable management bracket 74 on the tray during installation, the raised shoulder 46 of the tray 12 is received within a channel 82 moulded or otherwise formed in the underside 84 of the cable management bracket 74. Additionally, each cable management bracket 74 includes a cable management loop 86 for receiving a plurality of optic fibres (not shown) which are terminated at respective ones of the receptacles 54. A flexible strip 88 across the mouth of the cable management loop 86 is provided to releasably retain the plurality of optic fibers within the loop 86.

[0039] Although the present invention has been described hereinabove by way of specific embodiments thereof, it can be modified, without departing from the spirit and nature of the subject invention as defined in the appended claims.

Claims

1. A tray for providing a plurality of different modular fiber optic cassette configurations in a standard U-space fiber optic management system comprising:

a tray having a first tray side end portion and a second tray side end portion defining a tray width portion that extends between the first tray side end portion and the second tray side end portion;

wherein the tray width portion fits within a standard U-space width dimension;

wherein the tray is configured to fit a plurality of different modular fiber optic cassette configurations in the tray width portion in a standard U-space fiber management system;

wherein each of the plurality of different modular fiber optic cassette configurations include a modular fiber optic cassette that is configured to support a receptable module having a first module side end portion and a second module side end portion defining a module width portion that extends between the first tray side end portion and second tray side end portion;

wherein the module width portion is configured to fit in a standard one width (1W) unit;

wherein each of the modular fiber optic cassettes includes a first cassette side end portion and a second cassette side end portion defining a standard cassette width unit extending between the first cassette side end portion and the second cassette side end portion that comprises a standard two width (2W) unit, a standard three width (3W) unit, a standard four width (4W) unit, or a standard a standard six width (6W) unit relative to the standard one width (1W) unit;

wherein the receptable module is configured to fit at least four fiber optic plug receiving receptacle portions in a standard one width (1W) unit;

wherein the plurality of different modular fiber optic cassette

configurations comprise:

a first modular fiber optic cassette configuration that includes six modular two standard width unit (2W) cassettes that are each arranged side by side of each other along the tray such that a cassette side end portion of each modular two standard width (2W) cassette adjacently faces a cassette side end portion of at least one other modular two standard width (2W) cassette;

a second modular fiber optic cassette configuration that includes four modular three standard width unit (3W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular three standard width (3W) cassette adjacently faces a cassette side end portion of at least one other modular three standard width (3W) cassette;

a third modular fiber optic cassette configuration that includes three modular four standard width unit (4W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular four standard width (4W) cassette adjacently faces a cassette side end portion of at least one other modular four standard width (4W) cassette;

a fourth modular fiber optic cassette configuration that includes two modular six standard width unit (6W) cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the two modular six standard width (6W) cassettes adjacently faces a cassette side end portion of the other modular six standard width (6W) cassette; and

a fifth modular fiber optic cassette configuration that includes three modular two standard width unit (2W) cassettes, which are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the three modular two standard width (2W) cassettes adjacently faces a cassette side end portion of

one of the other modular two standard width (2W) cassette, and one modular six standard width unit (6W) cassette that is arranged side by side in a row along the tray with one of the three modular two standard width unit (2W) cassettes, such that a cassette side end portion of the one modular six standard width unit (6W) cassette adjacently faces a cassette side end portion of one of the other three modular two standard width unit (2W) cassettes;

wherein each modular two standard width (2W) cassette is configured to fit two receptacle modules;

wherein each modular three standard width (3W) cassette is configured to fit three receptacle modules;

wherein each modular four standard width (4W) cassette is configured to fit four receptacle modules;

wherein each modular six standard width (6W) cassette is configured to fit six receptacle modules;

wherein the tray is configured to be removably secured to each modular fiber optic cassette when the tray fits the plurality of different modular fiber optic cassette configurations within the tray width portion in the standard U-space fiber management system; and

wherein the tray includes a plurality of cassette engaging portions that are configured to conform to the standard one width (1W) so as to support the modular two standard width (2W) cassette, the modular three standard width (3W) cassette, the modular four standard width (4W) cassette, and the modular six standard width (6W) cassette.

2. The tray of claim 1, wherein the standard one width (1W) unit is based on a standard SC Duplex width unit that is configured to fit a plurality of different type of LC, SC, and MPO connectors.
3. The tray of claim 1, wherein the plurality of cassette engaging portions of the

tray are spaced apart from one another so as to conform to the standard one width (1W) and support the modular two standard width (2W) cassette, the modular three standard width (3W) cassette, the modular four standard width (4W) cassette, and the modular six standard width (6W) cassette.

4. The tray of claim 1, wherein the tray is configured to be slidingly received in at least a portion of a tray receiving space of a case of a fiber optic management system.
5. The tray of claim 1, wherein each of the modular fiber optic cassettes includes a cassette side end portion that is directly adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
6. The tray of claim 1, wherein each of the modular fiber optic cassettes includes a cassette side end portion that is adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
7. The tray of claim 1, wherein each of the modular fiber optic cassettes includes a cassette side end portion that touches a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
8. The tray of claim 1, wherein the tray has a first tray end portion, a second tray end portion spaced away from the first tray end portion so as to define a tray width extending between the first tray end portion and the second tray

end portion, and wherein the tray width is configured to fit at least twelve standard one width (1W) units side by side along the tray width.

9. A tray for providing a plurality of different modular fiber optic cassette configurations in a standard U-space fiber optic management system comprising:

a tray configured to fit in a standard U-space and support a plurality of different modular fiber optic cassette configurations in the standard U-space;

wherein each of the plurality of different modular fiber optic cassette configurations includes a plurality of different sizes of modular fiber optic cassettes;

wherein each of the plurality of different sizes of modular fiber optic cassettes is configured to support a fiber optic receptable module that is configured to fit in a standard one width (1W) unit;

wherein the plurality of different sizes of modular fiber optic cassettes include a 2W cassette size that is configured to fit a standard two width (2W) unit relative to the standard one width (1W) unit, a 3W cassette size that is configured to fit a standard three width (3W) unit relative to the standard one width (1W) unit, a 4W cassette size that is configured to fit a standard four width (4W) unit relative to the standard one width (1W) unit, and a 6W cassette size that is configured to fit a standard six width (6W) unit relative to the standard one width (1W) unit;

wherein the plurality of different modular fiber optic cassette configurations comprise:

a first modular fiber optic cassette configuration that includes six modular 2W standard width unit size cassettes that are each arranged side by side of each other along the tray such that a cassette side end portion of each modular 2W standard width unit size cassette adjacently faces a cassette side end portion of at least one other modular 2W standard width size cassette;

a second modular fiber optic cassette configuration that includes four modular 3W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular 3W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 3W standard width size cassette;

a third modular fiber optic cassette configuration that includes three modular 4W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of each modular 4W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 4W standard width size cassette;

a fourth modular fiber optic cassette configuration that includes two modular 6W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the two modular 6W standard width size cassettes adjacently faces a cassette side end portion of the other modular 6W standard width size cassette; and

a fifth modular fiber optic cassette configuration that includes three modular 2W standard width unit size cassettes, which are each arranged side by side of each other in a row along the tray such that a cassette side end portion of one of the three modular 2W standard width size cassettes adjacently faces a cassette side end portion of one of the other modular 2W standard width size cassette, and one modular 6W standard width unit size cassette that is arranged side by side in a row along the tray with one of the three modular 2W standard width unit size cassettes, such that a cassette side end portion of the one modular 6W standard width unit size cassette adjacently faces a cassette side end portion of one of the other three modular 2W standard width unit size cassettes;

wherein the tray is configured to be removably secured to each modular fiber optic cassette when the tray fits the plurality of different modular fiber optic cassette configurations within a tray width portion in the standard U-space fiber management system; and

wherein the tray includes a plurality of cassette engaging portions that are configured to conform to the standard one width (1W) so as to support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and the modular 6W standard width unit size cassette.

10. The tray of claim 9, wherein the standard one width (1W) unit is based on a standard SC Duplex width unit that is configured to fit a plurality of different type of LC, SC, and MPO connectors.
11. The tray of claim 9, wherein the plurality of cassette engaging portions of the tray are spaced apart from one another so as to conform to the standard one width (1W) and support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and the modular 6W standard width unit size cassette.
12. The tray of claim 9, wherein the tray is configured to be slidingly received in at least portion of a tray receiving space of a case of a fiber optic management system.
13. The tray of claim 9, wherein each of the modular fiber optic cassettes includes a cassette side end portion that is directly adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.

14. The tray of claim 9, wherein each of the modular fiber optic cassettes includes a cassette side end portion that is adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
15. The tray of claim 9, wherein each of the modular fiber optic cassettes includes a cassette side end portion that touches a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
16. The tray of claim 9, wherein the tray has first tray end portion, a second tray end portion spaced away from the first tray end portion so as to define a tray width extending between the first tray end portion and the second tray end portion, and wherein the tray width is configured to support at least twelve standard one width (1W) units side by side along the tray.
17. A tray for providing a plurality of different modular fiber optic cassette configurations in a fiber optic management system comprising:
 - a tray member configured to support a plurality of different modular fiber optic cassette configurations in a standard U-space width;
 - wherein the plurality of different modular fiber optic cassette configurations include different sizes of modular fiber optic cassettes;
 - wherein each of the different sizes of modular fiber optic cassettes is configured to support a fiber optic receptable module that is configured to fit in a standard one width (1W) unit;
 - wherein the plurality of different sizes of modular fiber optic cassettes include a 2W cassette size that is configured to fit a standard two width (2W)

unit relative to the standard one width (1W) unit, a 3W cassette size that is configured to fit a standard three width (3W) unit relative to the standard one width (1W) unit, a 4W cassette size that is configured to fit a standard four width (4W) unit relative to the standard one width (1W) unit, and a 6W cassette size that is configured to fit a standard six width (6W) unit relative to the standard one width (1W) unit;

wherein the plurality of different modular fiber optic cassette configurations comprise:

a first modular fiber optic cassette configuration that includes six modular 2W standard width unit size cassettes that are each arranged side by side of each other along the tray member such that a cassette side end portion of each modular 2W standard width unit size cassette adjacently faces a cassette side end portion of at least one other modular 2W standard width size cassette;

a second modular fiber optic cassette configuration that includes four modular 3W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of each modular 3W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 3W standard width size cassette;

a third modular fiber optic cassette configuration that includes three modular 4W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of each modular 4W standard width size cassette adjacently faces a cassette side end portion of at least one other modular 4W standard width size cassette; and

a fourth modular fiber optic cassette configuration that includes two modular 6W standard width unit size cassettes that are each arranged side by side of each other in a row along the tray member such that a cassette side end portion of one of the two modular 6W

standard width size cassettes adjacently faces a cassette side end portion of the other modular 6W standard width size cassette; and wherein the tray member is configured to conform to the standard one width (1W) so as to support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and the modular 6W standard width unit size cassette.

18. The tray member of claim 17, wherein the standard one width (1W) unit is based on a standard SC Duplex width unit that is configured to fit a plurality of different type of LC, SC, and MPO connectors.
19. The tray member of claim 17, wherein the tray member includes a row of cassette engaging portions that are spaced apart from one another so as to conform to the standard one width (1W) and support the modular 2W standard width unit size cassette, the modular 3W standard width unit size cassette, the modular 4W standard width unit size cassette, and the modular 6W standard width unit size cassette.
20. The tray member of claim 19, wherein the row of cassette engaging portions comprises a first row of cassette engaging portions, and the tray includes a second row of cassette engaging portions that is spaced away from the first row of cassette engaging portions.
21. The tray member of claim 20, wherein the first row of cassette engaging portion comprises a first row of slot portions that are each configured to engage a tab portion of each modular cassette.
22. The tray member of claim 17, wherein the tray member is configured to be slidably received in at least portion of a tray member receiving space of a

case of a fiber optic management system.

23. The tray member of claim 17, wherein each of the modular fiber optic cassettes includes a cassette side end portion that is directly adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
24. The tray member of claim 17, wherein each of the modular fiber optic cassettes includes a cassette side end portion that is adjacent to a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
25. The tray member of claim 17, wherein each of the modular fiber optic cassettes includes a cassette side end portion that touches a cassette side end portion of another module fiber optic cassette when each of the modular fiber optic cassettes are in the plurality of the plurality of different modular fiber optic cassette configurations.
26. The tray member of claim 17, wherein the tray member has a tray member width that is configured to support at least twelve standard one width (1W) units side by side along a row.
27. The tray member of claim 17, wherein the tray member has first tray member end portion, a second tray member end portion spaced away from the first tray member end portion so as to define a tray member width extending between the first tray member end portion and the second tray member end portion, and wherein the tray member width is configured to support at least twelve standard one width (1W) units side by side along the tray member.

28. The tray member of claim 17, wherein each of the modular fiber optic cassettes comprises a multi-fiber connector receiving receptacle portion arranged on a rear portion thereof.
29. The tray member of claim 17, wherein each of the modules fiber optic cassettes comprises four fiber optic plug receiving receptacle portions configured to be arranged side by side in a row along a front portion thereof for each standard width (1W) unit.
30. The tray member of claim 17, wherein the tray member comprises a cassette fastening portion that is configured to removably secure the tray member to each modular fiber optic cassette

Abstract

A tray for providing a plurality of different modular fiber optic cassette configurations may comprise a tray member that may support a plurality of different modular fiber optic cassette configurations in a standard U-space width. The different modular fiber optic cassette configurations may include different sizes of modular fiber optic cassettes. Each of the different sizes of modular fiber optic cassettes may support a fiber optic receptable module that may fit in a standard one width (1W) unit. The plurality of different sizes of modular fiber optic cassettes may include a 2W cassette size that may fit a standard two width (2W) unit (relative to the standard one width, (1W) unit), a 3W cassette size that may fit a standard three width (3W) unit, a 4W cassette size that may fit a standard four width (4W) unit, and/or a 6W cassette size that may fit a standard six width (6W) unit.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN
APPLICATION DATA SHEET (37 CFR 1.76)**

Title of Invention	MODULAR FIBER OPTIC CASSETTE, SYSTEM AND METHOD
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As the below named inventor, I hereby declare that:

This declaration is directed to: ☐ The attached application, or
☒ United States application or PCT international application number 16/143,831
filed on September 27, 2018

The above-identified application was made or authorized to be made by me.

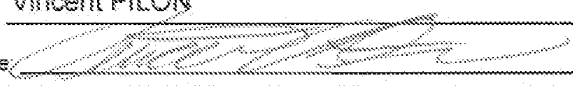
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

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Inventor: Vincent PILON Date (Optional): 10/01/2019
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