

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO	
RAD: 15-303156- -5	FECHA: 2016-06-13 09:38:41
DEP: 2020 DIRECCION DE NUEVAS CREACIONES	EVE: 1 REGISTRO/DEPOSITO/CONCESION/DEPOSITO
TRA: 3 PATENTES DE MODELO DE UTILIDAD	FOLIOS: 4
ACT: 519 TRASLADOINFORME	

DIRECCIÓN DE NUEVAS CREACIONES

2020
Bogotá, D.C.,

Abogado(a)/Señor(a)
CAROLINA VERA MATIZ

Asunto: Radicación: 15-303156- -5
 Trámite: 3
 Evento: 1
 Actuación: 519
 Oficio: 7056
 Folios: 4

Patente de Invención				Patente de Modelo de Utilidad	X
Vía Nacional	X				
Vía PCT (Fase Nacional)		Capítulo I		Capítulo II	
No. Solicitud Internacional					
Fecha de Presentación Internacional					

Como resultado del Examen de Fondo realizado, con fundamento en el artículo 85 y en concordancia con el artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le comunica:

1. Documentos estudiados

Descripción:	Radicado N° 15-303156-00000-0000	21/Diciembre/2015
Reivindicaciones:	Radicado N° 15-303156-00000-0000	21/Diciembre/2015
	Radicado N° 15-303156-00003-0000	26/Febrero/2016
Dibujos:	Radicado N° 15-303156-00000-0000	21/Diciembre/2015

2. Objeto de la invención

De acuerdo con lo establecido en el numeral 1.2.2.2 del capítulo primero del Título X de la Circular Única para efectos del examen de patentabilidad, se tendrá en cuenta la tasa pagada por la solicitante al momento de comenzar el examen para las reivindicaciones adicionales; esto es que cuando la solicitud contenga más de diez (10) reivindicaciones y no se haya pagado la tasa complementaria, sólo se estudiarán las cubiertas por la tasa pagada. En el presente caso se estudiarán las reivindicaciones 1 a 10 del capítulo reivindicatorio (Radicado N° 15-303156-00003-0000).

Título de la solicitud: “Instrumento para liberación o descubrimiento seguro de fibras ópticas de los tubos de transporte” (Radicado N° 15-303156-00000-0000).

El problema planteado en esta solicitud consiste en introducir un instrumento que cumpla con la función de separar los tubos de transporte de la fibra óptica. Que considere un componente ergonómico beneficioso para el usuario, permita una fácil manipulación para el usuario, sin sacrificar la perfección en el corte en busca de la protección de sus manos. De igual forma, que su mecanismo de corte presente una vida útil más prolongada, dado que en los diseños existentes, con el desgaste, incluso se recurre a desechar completamente la herramienta.

Para resolver este problema técnico la solicitud en estudio proporciona un instrumento manual desarrollado para liberar o descubrir las fibras ópticas desnudas que se encuentran dentro de los tubos de protección y transporte (denominados cables "buffer" por su traducción del inglés), de una forma segura tanto para la integridad de la fibra como para el operario del instrumento. Considerando estos dos factores se presenta una invención que posee una chuchilla inclinada la cual retira una capa del tubo de transporte y permite liberar de forma segura la fibra óptica, mientras el operario se ve beneficiado por factores ergonómicos considerados durante el corte, el cambio de las cuchillas y el proceso de medición del tubo de transporte para decidir en qué canal de corte se va a ubicar. El instrumento también consta de una reserva de cuchillas para facilitar el reemplazo de la cuchilla gastada.

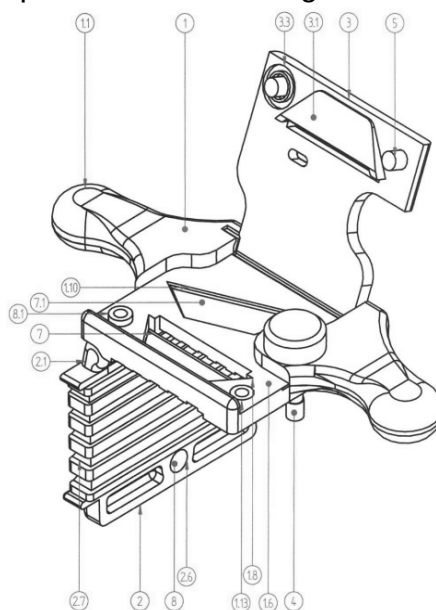


Figura 7

El objeto de la presente solicitud se relaciona con la Clasificación Internacional de Patentes (CIP): H 02 G 1/12; B 21 F 13/00.

3. De la solicitud de patente

Reivindicaciones (Art 30 D 486, Art 22 PCT)

Las reivindicaciones 1 a 10 no son claras porque:

- Las expresiones: “(...) que generan un espejo formal y funcional de dichos elementos” (reiv. 5); “(...) que se insertan en los alojamiento de bisagra de la tapa cuchillas y reserva (1.11) y permiten la escualización de la misma”, “(...) generan un cierre controlado de la tapa de cuchillas y reserva (3) asegurándose en las tuercas de cierre de la tapa de las cuchillas” (Reiv. 7), corresponden a características funcionales, las cuales aunque explican la relación que hay entre diversas características estructurales y pueden estar incluidas en las reivindicaciones, no definen la invención; de tal manera no se tienen en cuenta para el estudio de patentabilidad.

- Las expresiones: “(...) *determinado por un plano inclinado*” (Reiv. 5); “(...) *se mantiene en posición mediante la presión ejercida por el posicionador de cuchilla (3.1) ubicado en la tapa de cuchillas y reserva (3)*” (Reiv. 9), son resultados a alcanzar puesto que la reivindicación incluiría no sólo la solución propuesta por el solicitante, sino todas las alternativas presentes o futuras que lleguen a ese resultado. Se sugiere reemplazarlo por las características esenciales, estructurales, que contribuyen a la obtención de ese efecto.
- Las expresiones: “...*una tapa escualizable*” (Reivs. 1, 4, 6 y 8); “(...) *un borde distal de configuración semi-circular*” (Reiv. 2); “(...) *vaciados semi-cilíndricos*” (Reiv. 4), sugieren de forma imprecisa que la protección se extiende a otras posibles variaciones o modificaciones, por lo tanto, no son claras ya que no definen la materia a proteger. Se sugiere sustituir dichas expresiones por términos concretos.

4. Determinación del Estado de la Técnica

El estado de la técnica se determinó con base en la fecha de presentación nacional, 21 de diciembre de 2015 y, consultadas las fuentes documentales y bases de datos a las que tiene acceso esta oficina, no se encontró documento alguno que anticipe el objeto de esta solicitud.

5. Conclusión

Las reivindicaciones 1 a 10 no se encuentran divulgadas en el estado de la técnica, por lo tanto cumplen con los requisitos del Art. 16 de la Decisión 486, sin embargo, el solicitante debe realizar las correcciones a las reivindicaciones, indicadas en el numeral 3 del presente estudio, para continuar con el trámite de la solicitud.

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de treinta (30) días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Si como respuesta a este requerimiento el solicitante llegara a modificar: i) el capítulo reivindicatorio, ii) la descripción de la invención a proteger, iii) o presente un nuevo capítulo reivindicatorio, y desee que se realice un nuevo examen de patentabilidad a esta modificación, no deberá pagar la tasa de modificación voluntaria pero sí la correspondiente a la tasa de examen de patentabilidad. En todo caso, el número de requerimientos por no patentabilidad estará supeditado a que el término del estudio de patentabilidad no sea superior a 9 meses, contados desde la publicación de la solicitud de patente de modelo de utilidad. Adicionalmente, se le recuerda al solicitante que si como respuesta a este requerimiento llegara a modificar el capítulo reivindicatorio y éste contenga más de diez (10) reivindicaciones deberá pagar la tasa por reivindicación adicional.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única No. 10 de 2001.



JOSÉ LUIS SALAZAR LÓPEZ
Director de Nuevas Creaciones (c)

El anterior requerimiento fue notificado por fijación en lista, de fecha 2016-06-21

Elaboró: Oscar Ivan Orduz Berdugo
Revisó: Sonia Andrea Diaz Pirazan

Search history

Search 1: SFT=(cleav* or tool and optical and fiber and buffer and ergono*) (Results 310)

Search 2: FT=(cleav* and (tool or device or apparatus) and optical fiber and cut* and buffer) (Results 1244)

Search 3: 1 and 2 (Results 7)

Search 4: FT=(cleav* and (tool or device or apparatus) and optical fiber and cut* and buffer) and IC=(B26D1/06 or C03B37/16 or G02B6/00 or G02B6/25) (Results 187)

Search 5: 1 and 4 (Results 0)

Search 6: FT=(cleav* and (tool or device or apparatus) and optical fiber and cut* and buffer and gauge) and IC=(B26D1/06 or C03B37/16 or G02B6/00 or G02B6/25) (Results 29)

Search 7: TAC=(cleav* and (tool or device or apparatus) and optical fiber and coat* and remov* and buffer and gauge) and IC=(B26D1/06 or C03B37/16 or G02B6/00 or G02B6/25) (Results 1)

Search 8: TAC=(cleav* and (tool or device or apparatus) and optical fiber and coat* and remov* and buffer)} (Results 22)

Search 9: FT=(cable and cleav* and (tool or device or apparatus) and gauge and slot) (Results 144)

Search 10: FT=(cleav* and (tool or apparatus or device) and coating and cable and remove and gauge) (Results 282)

Search 11: FT=(cleav* and (tool or apparatus or device) and coating and cable and remove and gauge) and IC=(B26D1/06 or C03B37/16 or G02B6/00 or G02B6/25) (Results 24)

Search 12: FT=((cable or optical fiber) and coating and (tool or device or apparatus) and cleav* and buffer) (Results 1888)

Search 13: 1 and 12 (Results 9)

Search 14: fn=(59686322) (Results 1)

Search 15: [SP]: cross-reference to related applications [0001] this application claims the benefit of u.s. provisional patent application no. 61/926,075, filed 10 jan. 2014, and is a continuation in part of u.s. nonprovisional patent application ser. no. 13/974,621, filed 23 aug. 2013, which claims priority to u.s. provisional patent application no. 61/692,900, filed aug. 24, 2012, the contents of each of which being full incorporated by reference herein. technical field [0002] the present invention relates generally to the design and configuration of mechanical devices, and more specifically to an optical fiber strand and splice sleeve holder and organizer for use during optical fiber cable splicing. background of the invention [0003] the field of fiber optics has greatly expanded, largely in response to the constantly increasing demand for greater bandwidth in the telecommunications industry. new telecommunications pathways are created-and old ones replaced-as fiber optic lines are installed all over the world. this activity has led to a high demand for cable installation and maintenance services as optical fiber cables are increasingly preferred over copper and other analog telecommunications pathways.[0004] optical fiber cables are generally composed of one or more optical fibers, also referred to as simply "fibers" or "strands," and commonly carry many optical fibers. each fiber consists of a transparent core, or bare fiber, through which optical data signal modes, or light signal modes, may travel. the manufacturing method and particular makeup of a core can vary amongst manufacturers and applications. regardless, each fiber core acts as a waveguide for one (referred to as single-mode fibers) or more (referred to as multi-mode fibers) modes. the fiber core is coated in a protective optical cladding that, in conjunction with the fiber core, utilizes the effect of total internal reflection to confine light signals to the fiber core and transmit them along the fiber's axis.[0005] the cladding is in turn coated in one or more buffer layers or protective coatings for increased protection from moisture and physical damage. in some applications, multiple fibers are contained within one or more buffer layers or coatings, while in other cases a plurality of fibers with buffer layers or coatings are contained within a larger buffer layer or coating. in both circumstances, the encased group of fibers is referred to as a fiber "tube," or "bundle." in most applications, multiple fiber bundles will be encased in at least one jacket layer as well, forming the complete optical fiber cable. fiber cables in general may also contain various strengthening members, such as mesh sleeves or semi-rigid cores, as well as various coatings, buffer layers, and jackets depending on the specific characteristics required of a fiber cable for a particular application.[0006] generally, the most predominant forms of commercially available fiber cables come in one of two configurations. in the first configuration, the cable is composed of 12n fibers, where there are n number of fiber bundles each containing 12 fibers. these cables are often referred to as 12-strand tubes. the 12-strand tubes each are composed of 12 fibers wrapped in at least one buffer layer. a fiber cable utilizing n 12-strand tubes will therefore be comprised of 12n fibers.[0007] similarly, another somewhat common configuration utilizes 6-strand tubes wherein each tube contains six fibers. therefore, a cable utilizing n 6-strand tubes will be comprised of a total of 6n fibers. while any configuration is possible, those utilizing one or more 6- and 12-strand conduits within the cable jacket are the most prevalent. regardless of the configuration, fiber optic cables are comprised generally of fiber cores surrounded by a cladding layer, with one or more of such fibers coated with or sheathed in a protective buffer layer to form a fiber bundle. covering one or more such fiber bundles with one or more protective jacket layers then forms a typical fiber optic cable. optical fiber cables thus commonly have, for instance, 12, 24, 48, 96, 216, or 432 individual optical fibers, or other such combinations.[0008] two optical fiber cables must frequently be joined end-to-end to form a continuous optical waveguide. cable splicing is performed, for example, when laying new optical fiber cables. contiguous sections of optical fiber cable are joined together at their abutting, or proximal (relative to the joint), ends to form a continuous complete cable between their distal ends. cable splicing can, for example, permit the installation of optical fiber over great distances and around obstacles and turns in the cable path.[0009] during splicing activity in which two fiber optic cables are spliced together to form a continuous waveguide, a splice protector having a strengthening member is usually secured around the spliced joint to add strength and rigidity to the joint. the splice protector is sometimes referred to as a splice tube, a splice connection sleeve, a splice protection sleeve, or simply a splice sleeve. the strengthening member is often made of metal or alloy, but may also be made of plastic or other elastic or pliable material. it adds rigidity to the spliced joint in order to decrease the amount of potential flex that can occur at the interface of the proximal ends of the cable members when one member experiences movement relative to the other. such movement exerts stress on the splice joint, potentially damaging the connection and reducing, impairing or terminating the ability of data signals to traverse the joint with minimal loss, attenuation or degradation. the strengthening member protects the integrity of the splice joint by absorbing unwanted forces and maintaining the positioning of the optical fiber proximal ends relative to one another.[0010] splice sleeves are normally comprised of an inner fiber tube, a strengthening member, and an outer shrink tube. the inner fiber tube is often made of a flexible, dielectric material and is the splice sleeve element through which the joined optical fibers pass. the outer shrink tube encompasses the inner fiber tube and strengthening member. the strengthening member is positioned between the exterior of the inner fiber tube and the interior of the outer shrink tube.[0011] to splice the proximal ends of two contiguous optical fiber cables, it is common practice to strip the outer cable jackets and protective coatings to access the one or more fiber bundles. each fiber bundle exterior is then stripped to gain access to the fibers themselves, if necessary, and cladding is removed from the cores. the fibers at the abutting end of one of the two contiguous cables are matched to the corresponding fibers at the abutting end of the other cable to form a fiber pair. one fiber in each fiber pair is threaded through a splice sleeve before the fiber pair is spliced together.[0012] each fiber pair is then prepped for splicing by cleaning the fiber, stripping the fiber cladding (if not previously done), and cleaving the ends of the fiber core. the fiber pair is then spliced together and the optical characteristics of the joint are tested to ensure that the splice was carried out successfully. upon the confirmation that the splice has been completed successfully, the splice sleeve is positioned over the splice joint. heat is applied to the splice sleeve to shrink or melt the outer shrink tube to the fiber, splice joint and other splice sleeve components.[0013] the current methods of optical fiber cable splicing present several unsolved problems. as various fiber pairs are in the process of being prepped and spliced, natural movement and jostling of the fiber pair being attended to can often cause the remaining optical fibers in the bundle to shift and move about the workstation. this can have several negative consequences, such as the remaining fibers becoming tangled or broken. these fibers can also come into contact with substances present on the workstation, contaminating them and potentially causing undesirable optical characteristics, decreasing the longevity of the spliced joint, or it can simply create further cleaning work for the installers, increasing the installation time and cost. substances used in the splicing process or from the interior of the optical fiber cables used to clear the interior of any moisture will often be present on the workstation surfaces and can contaminate stray fibers that have shifted out of position.[0014] the problems caused by shifting fibers can also be magnified when one or more unsuccessful attempts are made when stripping or cleaving the fiber. multiple attempts at stripping and cleaving can result in some fibers being shorter relative to the terminal ends of other fibers in the bundle. this can occur relatively between fiber bundles as well. splicing a shortened pair will draw the longer pairs closer together and create slack in those corresponding fibers. this can exacerbate the problem of fibers becoming tangled, contaminated or broken due to movement.[0015] the movement of the fibers as described above also poses a significant increase in the time expended when splicing two cables together. for example, for the fibers that have not yet been spliced to their corresponding match, such movement can cause the splicing sleeve that has been pre-threaded to slide off the fiber onto which it was placed. the splicing sleeve must then be retrieved, checked for contamination or discarded, and be placed back onto the fiber or replaced with a new splicing sleeve. this can occur several times over the course of the splicing activity for each fiber pair, leading to considerable decreases in productivity and increases in a project's material waste.[0016] fur (Results 2)

Search 16: 2 and 12 (Results 803)

Search 17: 16 and 8 (Results 18)

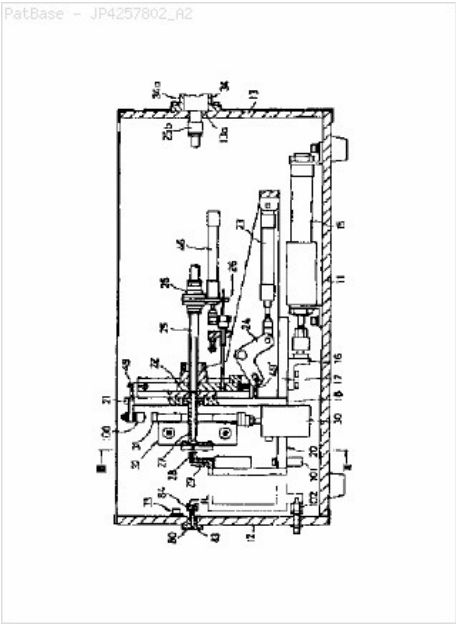
Search 18: FN=(3876963 OR 8086262 OR 8211585 OR 11256023 OR 12578487 OR 12742174 OR 12898930 OR 15311463 OR 28039542 OR 30047584 OR 3022248 OR 30669283 OR 31060407 OR 38310569 OR 46068585 OR 46870425) (Results 16)

Title: AUTOMATIC TERMINAL PROCESSING DEVICE FOR OPTICAL CABLE

Abstract: Source: JP4257802A PURPOSE:To automatically strip the jacket layer and internal layer at a terminal of the optical cable. CONSTITUTION:The optical cable which is inserted is gripped by a gripping mechanism 33 and after its tip is held by a work guide 28 and positioned by a positioning mechanism 27, a cutter mechanism 32 cut both sides of the jacket layer at the tip of the optical cable axially and strips the tip of the jacket layer to expose a synthetic fiber reinforcement layer. The tip of the bare synthetic fiber reinforcement layer is gripped by a gripping mechanism 29 to bare the tip of the internal layer at the time of backward movement and strip the tip of the internal layer by the cutter mechanism 32 at the time of forward removal. The tip parts of the stripped jacket layer and internal layer are sucked and removed through a vacuum tube 25.

Classifications:

International (IPC 8-9): B26D1/09 G02B6/00 G02B6/245 G02B6/44 H02G1/12 (Advanced/Invention); B26D1/01 G02B6/00 G02B6/245 G02B6/44 H02G1/12 (Core/Invention)
International (IPC 1-7): B26D1/09 G02B6/00 G02B6/44 H02G1/12
CPC: G02B6/245
European: G02B6/245



Family:

Publication number	Publication date	Application number	Application date
JP4257802 A2	19920914	JP19910020148	19910213

Priority:

JP19910020148 19910213

Probable Assignee: FURUKAWA ELECTRIC CO LTD

Assignee(s): (std): FURUKAWA ELECTRIC CO LTD

Assignee(s): FURUKAWA ELECTRIC CO LTD THE ; THE FURUKAW ELECTRIC CO LTD

Inventor(s): (std): SASAKI HISAMI

Title: TIP PROCESSING METHOD FOR JACKETED OPTICAL FIBERS

Abstract: Source: US5469611A A tip processing apparatus is equipped with a holder and a holder holding unit for extending the tip of the jacketed optical fiber comprising at least one optical fiber provided with a jacket, the holder holding the jacketed optical fiber in place. The apparatus also includes in a jacket removing unit for removing a desired length of the jacket, leaving the jacket on the tip of the jacketed optical fiber; a cleaning unit for cleaning the optical fiber exposed by the jacket removal carried out in the jacket removing unit; and a cutting unit for performing cut processing thereby to trim the optical fiber cleaned by the cleaning unit. A tip processing method comprises moving a portion of the jacket by a desired length while leaving a portion of the jacket on the tip, and all processing steps of the jacket removing, cleaning, and cutting of the optical fiber are performed on the optical fiber with the jacket portion left on the tip.

Classifications:

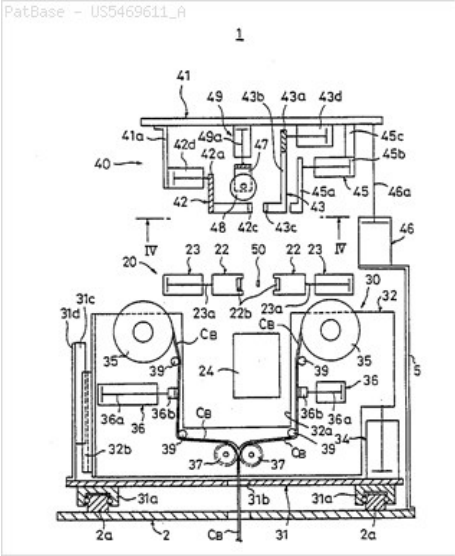
International (IPC 8-9): B26D3/00 B26D3/08 G01M11/00 G02B6/00 G02B6/24 G02B6/245 G02B6/25 G02B6/40 H02G1/14 (Advanced/Invention); B26D3/00 B26D3/08 G01M11/00 G02B6/00 G02B6/24 G02B6/40 H02G1/14 (Core/Invention)

International (IPC 1-7): B26D3/00 B26D3/08 B26F3/00 G01M11/00 G02B6/00 G02B6/02 G02B6/24 G02B6/245 G02B6/25 G02B6/40 H02G1/14

CPC: Y10T29/49817 Y10T29/49821 Y10T29/514 Y10T29/515 Y10T29/53087 G02B6/25 G02B6/245 Y10T225/325

European: G02B6/245 G02B6/25

US: 15/256.6 225/96.5 225/965 29/426.2 29/426.4 29/564.4 29/566.3 29/720 81/9.51 81/951



Family:

Publication number	Publication date	Application number	Application date
CA2065749 AA	19921013	CA19922065749	19920410
CA2065749 C	20020305	CA19922065749	19920410
DE69215738 D1	19970123	DE19926015738	19920413
DE69215738 T2	19970710	DE19926015738	19920413
EP0509737 A2	19921021	EP19920303287	19920413
EP0509737 A3	19921230	EP19920303287	19920413
EP0509737 B1	19961211	EP19920303287	19920413
JP2651055 B2	19970910	JP19910080155	19910412
JP4314003 A2	19921105	JP19910080153	19910412
JP4314004 A2	19921105	JP19910080154	19910412
JP4314009 A2	19921105	JP19910080155	19910412
US5253412 A	19931019	US19920866795	19920408
US5469611 A	19951128	US19940315197	19940929

Priority:

JP19910080154 19910412 JP19910080155 19910412 US19930054796 19930428
US19920866795 19920408 CA19922065749 19920410 JP19910080153 19910412
US19940315197 19940929

Probable Assignee: OWENS CORNING FIBERGLAS TECHNOLOGY INC

Assignee(s): (std): FURUKAWA ELECTRIC CO LTD

Assignee(s): THE FURUKAWA ELECTRIC CO LTD ; FURUKAWA ELECTRIC CO LTD TOKIO TOKYO JP ; YAMAGUCHI SHIZUKA ; SASAKI KOJI ; OWENS CORNING FIBERGLAS TECHNOLOGY INC ; FURUKAWA ELECTRIC CO LTD THE ; THE FURUKAWA ELECTRIC CO ; THE FURUKAW ELECTRIC CO LTD ; FUKUOKA SATOSHI ; FUMENO TSUYOSHI ; FURUKAWA DENKI KOGYO KK ; FURUKAWA ELECTRIC CO

Inventor(s): (std): FUKUOKA SATOSHI ; FUMENO TSUYOSHI ; SASAKI KOJI ; YAMAGUCHI SHIZUKA ; FUMENO TAKESHI

Inventor(s): YAMAGUCHI SHIZUKA ICHIHARA SHI CHIBA JP ; SASAKI KOJI TATSUMIDAI HIGASHI ICHIHARA SHI... ; FUMENO TSUYOSHI TATSUMIDAIHIGASHI ICHIHARA SHI... ; SASAKI KOJI TATSUMIDAI HIGASHI ICHIHARA SHI CHIBA ; SASAKI KOJI TATSUMIDAI HIGASHI ICHIHARA SHI CHIBA JP ; FUMENO TSUYOSHI TATSUMIDAIHIGASHI ICHIHARA SHI CHI ; FUMENO TSUYOSHI TATSUMIDAIHIGASHI ICHIHARA SHI CHIBA JP ; FUKUOKA SATOSHI TATSUMIDAIHIGASHI ICHIHARA SHI CHI ; FUKUOKA SATOSHI TATSUMIDAIHIGASHI ICHIHARA SHI CHIBA JP ; FUKUOKA SATOSHI TATSUMIDAIHIGASHI ICHIHARA SHI...

Agent(s): SMART AND BIGGAR

Designated states: DE FR GB IT

Title: Automatic optical measuring apparatus for optical fibers

Abstract: Source: US5253035A An automatic optical measuring apparatus for optical fibers which is designed to automatically perform a series of steps from processing tips to optical measurement of a plurality of jacketed optical fibers each comprising at least one optical fiber provided with a jacket. The automatic optical measuring apparatus is equipped with first through third array units wherein a plurality of first through third holders are arranged; first through third tip processing units for processing the ends of the individual optical fibers; first and second optical measuring units; first and second connecting units for connecting each end of the jacketed optical fiber to the optical measuring apparatus and a light source; first through third carrying units which carry the first through third holders; a haul-in unit which hauls in and cuts a specified length of the jacketed optical fiber held in the second holder at the end on the first holder; a hand-over unit which hands over the cut end of the jacketed optical fiber on the second holder onto the third holder; and a controlling unit which controls the operation of each of the aforementioned component units.

Classifications:

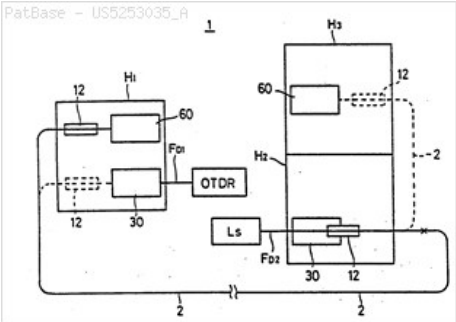
International (IPC 8-9): G01M11/00 G01M11/02 G02B6/00 G02B6/24 G02B6/245 G02B6/25 G02B6/40 (Advanced/Invention); G02B6/00 G02B6/24 G02B6/245 G02B6/25 G02B6/40 (Core/Invention)

International (IPC 1-7): G01M11/00 G01M11/02 G01N21/84 G02B6/00 G02B6/24 G02B6/40

CPC: G01M11/3109 G02B6/245 G02B6/25

European: G01M11/00B2A G01M11/31A G02B6/245 G02B6/25

US: 356/73.1



Family:

Publication number	Publication date	Application number	Application date
JP4314006 A2	19921105	JP19910080156	19910412
JP4314007 A2	19921105	JP19910080157	19910412
JP5005674 A2	19930114	JP19910158643	19910628
JP5026770 A2	19930202	JP19910177930	19910718
US5253035 A	19931012	US19920866801	19920408

Priority:

JP19910080156 19910412 JP19910080157 19910412 JP19910158643 19910628
JP19910177930 19910718

Probable Assignee: FURUKAWA ELECTRIC CO LTD

Assignee(s): (std): FURUKAWA ELECTRIC CO LTD

Assignee(s): FURUKAWA ELECTRIC CO LTD THE ; THE FURUKAW ELECTRIC CO LTD ; THE FURUKAWA ELECTRIC CO ; THE FURUKAWA ELECTRIC CO LTD

Inventor(s): (std): FUKUOKA SATOSHI ; FUMENO TAKESHI ; FUMENO TSUYOSHI ; SASAKI KOJI ; YAMAGUCHI SHIZUKA

Title: Apparatus for inserting optical cable into ferrule

Abstract: Source: US5235664A An apparatus for inserting an optical cable into a ferrule which has a cable housing aperture and a fiber retention aperture connected to the cable housing aperture via a tapered section, which includes a cable holder (2) for holding an optical cable (1) from which a length of cable jacket is removed to expose an optical fiber (1B); a ferrule holder (5) for holding a ferrule (F) such that a cable housing aperture (F1) and a fiber retention aperture (F3) are aligned in an extension line of the optical cable; a guiding unit (4) disposed in front of the ferrule holder and having a pair of guiding members (41A, 41B) to form a guiding aperture (43) with a diameter slightly larger than that of the fiber retention aperture; the guiding members movable sideways so that the ferrule holder brings the ferrule close to the cable holder, thereby inserting the optical cable into the ferrule.

Classifications:

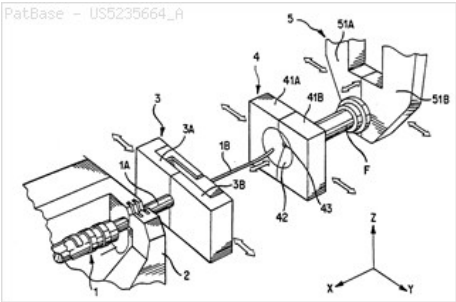
International (IPC 8-9): G02B6/36 G02B6/38 (Advanced/Invention)

International (IPC 1-7): G02B6/36

CPC: G02B6/3837 G02B6/3898

European: G02B6/38D6D2B S02B6/38D18

US: 1 100/0 385/134 385/137 385/60



Family:

Publication number	Publication date	Application number	Application date
JP4345107 A2	19921201	JP19910145246	19910522
US5235664 A	19930810	US19920886357	19920521

Priority:

JP19910145246 19910522

Probable Assignee: HIROSE ELECTRIC CO LTD

Assignee(s): (std): HIROSE ELECTRIC CO LTD

Assignee(s): HIROSE ELECTRIC CO

Inventor(s): (std): KOBAYASHI NORIO ; OKADA KINJIRO ; SHIRAISHI HIROMASA ; TAKEHANA SHINICHI ; YOKOSAWA HIROKAZU ; YOKOZAWA HIROKAZU

Title: TERMINAL MACHINING DEVICE FOR COATED OPTICAL FIBER

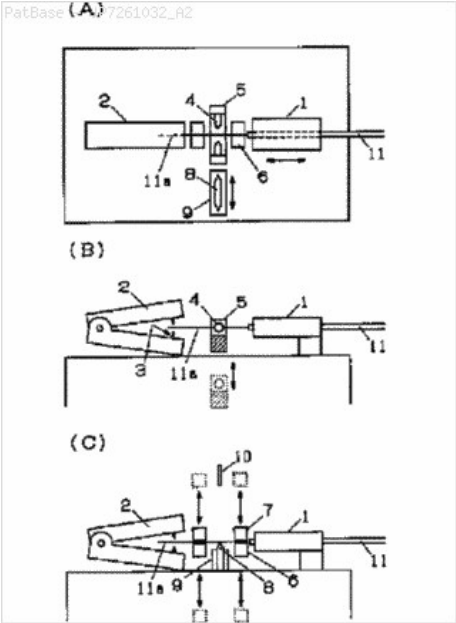
Abstract: Source: JP7261032A PURPOSE:To provide a terminal machining device for optical fiber which can be constituted compactly with a simple mechanism and is automated. CONSTITUTION:The optical fiber 11 is held at an optical fiber holding and moving part 1, and the jacket is cut with a jacket removing blade 3 and held. The jacket is drawn and removed by the movement of the optical fiber holding and moving part 1. Then, a couple of electrodes 4 held by an electrode holding and moving part 5 are elevated and discharge is caused to burn out the remaining unremoved jacket. Then, the glass part 11a of the optical fiber is clamped by a couple of optical fiber clamp bases 6 and a couple of optical fiber clamps 7 and flawed from below with a flawing blade 8 held on a flawing blade holding and moving table 9 which moves in a horizontal plane, and, the flawing blade holding and moving base 9 is made to stand by and a pressing force is applied from above by an optical fiber bending piece 10 to bent and cut the optical fiber. The cut surfaces become mirror surfaces.

Classifications:

International (IPC 8-9): G02B6/00 (Advanced/Invention);

G02B6/00 (Core/Invention)

International (IPC 1-7): G02B6/00



Family:

Publication number	Publication date	Application number	Application date
JP7261032 A2	19951013	JP19940053449	19940324

Priority:

JP19940053449 19940324

Probable Assignee: SUMITOMO ELECTRIC IND

Assignee(s): (std): SUMITOMO ELECTRIC IND ; SUMITOMO ELECTRIC INDUSTRIES

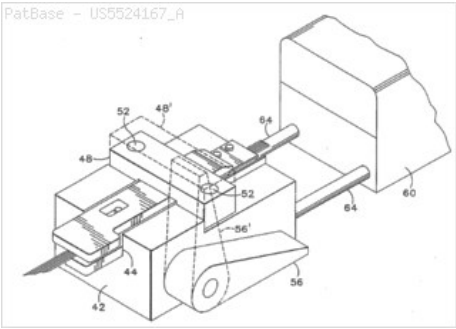
Assignee(s): SUMITOMO ELECTRIC IND LTD

Inventor(s): (std): SAKAMOTO KATSUJI

Title: Holder for loose optical fibers

Abstract: Source: US5524167A A holder for receiving and holding a plurality of loose optical fibers which are of substantially equal thickness, comprises a base plate having a top surface on which the fibers can rest in side by side relationship, and an abutment projecting above the top surface of the base plate and defining a shoulder against which one of the fibers resting on the top surface can engage. A keeper extends over the top surface of the base plate in spaced relationship therewith for restraining the fibers against movement away from the top surface, and a lid is pivotable relative to the base plate between a closed position, in which it engages the fibers, and an open position. The base plate includes a permanent magnet and the lid includes magnetic material, whereby when the lid is in the closed position, it is retained in that position by magnetic attraction.

Classifications:
International (IPC 8-9): G02B6/25 G02B6/36 (Advanced/Invention)
International (IPC 1-7): G02B6/00 G02B6/36
CPC: G02B6/25 G02B6/3616 G02B6/3628
European: S02B6/36M
US: 385/137



Family:

Publication number	Publication date	Application number	Application date
US5524167 A	19960604	US19950378619	19950126

Priority:
US19950378619 19950126

Probable Assignee: SILICON VALLEY BANK

Assignee(s): BOEHME MARTIN L ; EWERT ROBERT A ; HILL WARREN R ; KRITLER DAVID A ; SILICON VALLEY BANK

Inventor(s): (std): BOEHME MARTIN L ; EWERT ROBERT A ; HILL WARREN R ; KRITLER DAVID A

Title: RIBBON FIBRE FIXATING DEVICE

Abstract: Source: US6337943B A device is for fixating a fiber ribbon cable in a ribbon fiber cutting machine. A fixture or jig holding a stripped fiber ribbon cable is placed on the cutting machine in a predetermined position, by placing the jig in a machine-mounted holder and pressing the jig against one side thereof. The jig is positioned so that the ribbon fibers will enter respective V-grooves on a first support and engage a resilient surface on a second support. The fibers can be linearised in the grooves on said support surface, despite possibly being deformed when stripping the cable, by angling the jig in relation to said V-grooves on said support surface. The fibers are pressed down into the grooves, thereby fixating the fibers in both a vertical and a lateral direction. The fibers will also be parallel with one another in the space between said support. Arranged in said space is a knife by means of which a fracture line or weakening is made on the fibers. A weight is then caused to drop onto the fibers, so as to exert force at the fracture lines or weakenings.

Classifications:

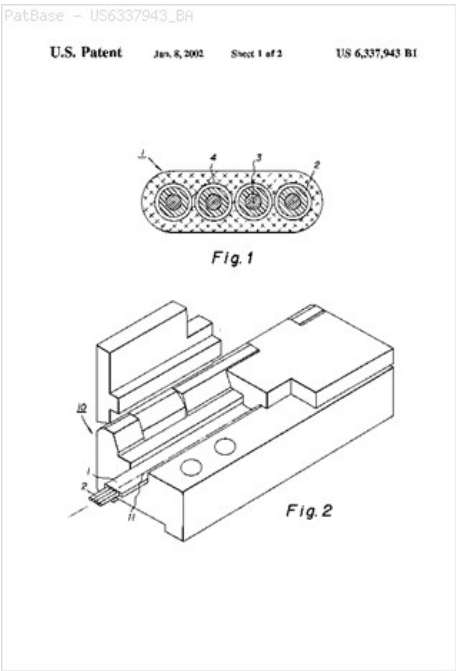
International (IPC 8-9): G02B6/00 G02B6/25 G02B6/44 (Advanced/Invention); G02B6/00 G02B6/25 G02B6/44 (Core/Invention)

International (IPC 1-7): C03B37/16 G02B6/00 G02B6/25 G02B6/44

CPC: Y10T225/12 Y10T225/325 G02B6/25

European: G02B6/25

US: 225/2 225/96.5 225/965 385/137



Family:

Publication number	Publication date	Application number	Application date
EP0926518 A2	19990630	EP19980850197	19981218
EP0926518 A3	20000503	EP19980850197	19981218
JP11248945 A2	19990917	JP19980363412	19981221
SE513049 C2	20000626	SE19970004765	19971219
SE9704765 A	19990620	SE19970004765D	19971219
SE9704765 A0	19971219	SE19970004765	19971219
SE9704765 L	19990620	SE19970004765	19971219
US6337943 BA	20020108	US19980215308	19981218

Priority:

SE19970004765 19971219

Probable Assignee: TELEFONAKTIEBOLAGET LM ERICSSON

Assignee(s): (std): ERICSSON TELEFON AB L M ; ERICSSON TELEFON L M AB

Assignee(s): TELEFON AB L M ERICSSON ; TELEFONAKTIEBOLAGET L M ERICSSON ; TELEFONAKTIEBOLAGET LM ERICSSONS ; TELEFONAKTIEBOLAGET LM ERICSSON ; TELEFONAKTIEBOLAGET LM ERICSSON PUBL

Inventor(s): (std): DUMITRIU ION ; DOMITRIU ION

Inventor(s): ION DOMITRIU

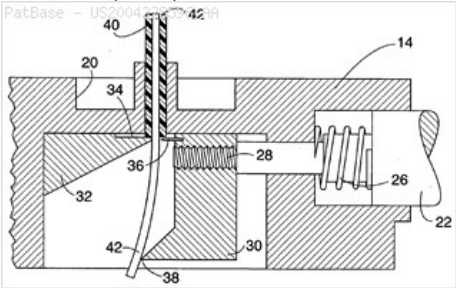
Agent(s): ASAMURA KIYOSHI; IWAMOTO YUKIO; ASAMURA HAJIME; MORI TOHRU

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Title: OPTICAL FIBER CLEAVER

Abstract: Source: US2004228596A A device for cleaving optical fibers is provided. The device includes a housing assembly having an opening therein for receiving an optical fiber to be cleaved, and housing bending and cutting members which are reciprocally moveable in a direction transversely and substantially perpendicularly to the longitudinal axis of an optical fiber inserted into and through the opening into the housing. The housing assembly optionally has a removably connected receptacle for receiving the cut ends of a plurality of cleaved fibers.

Classifications:
International (IPC 8-9): G02B6/25 (Advanced/Invention); G02B6/25 (Core/Invention)
International (IPC 1-7): B26B3/00 B26D3/08 B26F3/00 G02B6/00 G02B6/25
CPC: Y10T83/0333 Y10T225/314 Y10T225/321 Y10T225/325 Y10T225/371 G02B6/25
European: G02B6/25
US: 225/103 225/95 225/96 225/96.5 225/965 30/308 385/134 385/147 83/879 83/897



Family:

Publication number	Publication date	Application number	Application date
AU200077540 A5	20010423	AU20000077540D	20001004
US2004228596 AA	20041118	US20040783996	20040220
US6695191 BA	20040224	US19990414581	19991008
US6901199 BB	20050531	US20040783996	20040220
WO0127671 A1	20010419	WO2000US27441	20001004

Priority:
US19990414581 19991008 WO2000US27441 20001004 US20040783996 20040220

Probable Assignee: LEVITON MFG CO

Assignee(s): (std): LEVITON MANUFACTURING CO ; LEVITON MFG CO

Assignee(s): LEVITON MFG CO INC ; LEVITON MANUFACTURING CO INC ; LEVITON MFG ; DELAWARE DIAMOND KNIVES INC

Inventor(s): (std): TABELING JOSEPH W

Inventor(s): JOSEPH W TABELING

Agent(s): DAVIS WRIGHT TREMAINE LLP; RONDEAU JR GEORGE C; GEORGE C

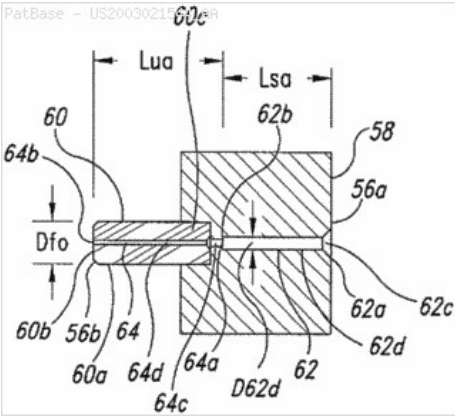
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Title: ADAPTER FOR OPTICAL FIBER CLEAVER

Abstract: Source: US2003021544A An adapter for an optical fiber cleaver for cleaving optical fiber. The optical fiber cleaver includes an opening therein for receiving a connector ferrule of a first category fiber connector containing an unsheathed optical fiber end portion extending therebeyond. The optical fiber cleaver is designed to cleave a portion of the unsheathed optical fiber end portion extending beyond the connector ferrule. The adapter has a tail piece which can hold an unsheathed optical fiber end portion to be cleaved to a selected length prior to insertion into a second category fiber connector. The tail piece has a diameter similar to the ferrule for insertion into the cleaver opening and a length selected to produce a cleaved unsheathed optical fiber end portion of a length needed for the second category fiber connector different than the length cut by the cleaver for the first category fiber connector.

Classifications:

International (IPC 8-9): G02B6/25 G02B6/38 (Advanced/Invention); G02B6/25 G02B6/38 (Core/Invention)
International (IPC 1-7): B26D3/08 G02B6/36
CPC: Y10T225/321 Y10T225/325 G02B6/385 G02B6/25 G02B6/3807 G02B6/3833 G02B6/3898
European: G02B6/25 G02B6/38D G02B6/38D18 G02B6/38D6 G02B6/38D6I
US: 225/96 225/96.5 385/134 385/147 385/53 385/53S 385/75 385/75P



Family:

Publication number	Publication date	Application number	Application date
US2003021544 AA	20030130	US20010916562	20010726
US6628879 BB	20030930	US20010916562	20010726

Priority:

US20010916562 20010726

Probable Assignee: LEVITON MFG CO INC

Assignee(s): (std): LEVITON MANUFACTURING CO ; LEVITON MFG CO

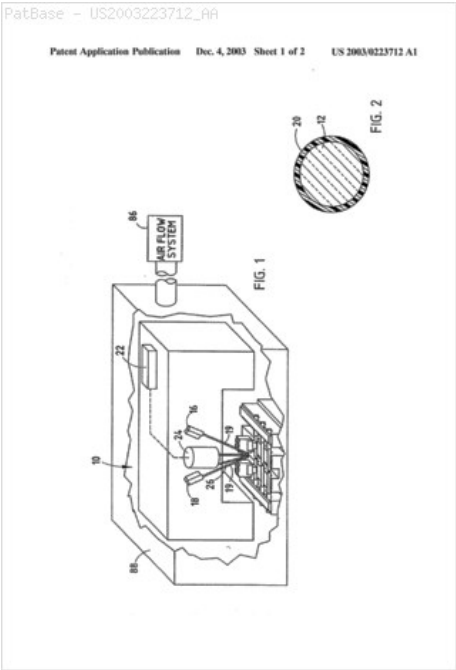
Assignee(s): LEVITON MFG CO INC ; ROBINSON SCOTT THOMAS ; LEVITON MANUFACTURING CO INC ; LEVITON MFG ; ITANO MICHAEL MASATSUGU ; LEVITON MANU CTURING FA

Inventor(s): (std): ITANO MICHAEL MASATSUGU ; ROBINSON SCOTT THOMAS

Title: OPTICAL FIBER SPLICE MANUFACTURING PROCESS

Abstract: Source: US2003223712A A method for splicing optical fibers includes securing a first optical fiber and a second optical fiber within an apparatus, stripping a coating from about the first optical fiber by a first laser beam generated from at least one laser, and stripping a coating from about the second optical fiber by the first laser beam. The method also includes cleaving an end of the first optical fiber via a second beam from the laser, and cleaving an end of the second optical fiber via the second laser beam. The method further includes splicing the ends of the optical fibers together via a third laser beam from the laser, thereby creating a fused connection between the first optical fiber and the second optical fiber, and removing the first and second optical fibers from within the apparatus.

Classifications:
International (IPC 8-9): G02B6/245 G02B6/255 (Advanced/Invention);
G02B6/245 G02B6/255 (Core/Invention)
International (IPC 1-7): G02B6/255
CPC: G02B6/245 G02B6/2551
European: G02B6/245 G02B6/255B
US: 385/96 385/97 385/98



Family:

Publication number	Publication date	Application number	Application date
US2003223712 AA	20031204	US20020159908	20020531
US7029187 BB	20060418	US20020159908	20020531

Priority:

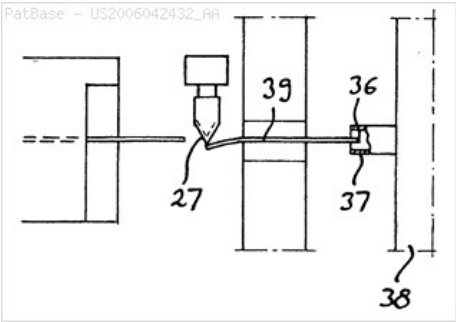
US20020159908 20020531

Probable Assignee: CORNING INC
Assignee(s): (std): CHAPMAN THOMAS R ; CORNING INC ; KLINGENSMITH L KIRK
Inventor(s): (std): CHAPMAN THOMAS R ; KLINGENSMITH L KIRK
Agent(s): RONALD J

Title: APPARATUS AND A METHOD FOR CLEAVING THIN RODS

Abstract: Source: US2006042432A An apparatus for cleaving thin rods of glass or quartz comprises a rod cleaving blade (27) and a body (28) carrying the blade. The body is of a material varying its length through application of electric and/or magnetic fields therein. Driving means (31, 33) are adapted to achieve a relatively steady movement of the blade towards a desired cleaving point and a relatively small-amplitude vibratory component of movement towards and away from the cleaving point superimposed to the relatively steady movement by influencing said body electrically and/or magnetically. A driving means is adapted to make the blade vibrate with a frequency below 1 kHz during the cleaving operation.

Classifications:
International (IPC 8-9): B26D1/00 B26F3/00 C03B37/16
G02B6/25 (Advanced/Invention);
B26D1/00 B26F3/00 C03B37/10 G02B6/25 (Core/Invention)
International (IPC 1-7): G02B6/25
CPC: Y10T83/04 Y10T225/10 Y10T225/386 G02B6/25
European: G02B6/25
US: 225/1 225/105 225/1P 83/13 83/956



Family:

Publication number	Publication date	Application number	Application date
AT396414 E	20080615	AT20030738821T	20030610
AU2003245202 AA	20040106	AU20030245202	20030610
DE60321173 D1	20080703	DE20036021173	20030610
EP1516214 A1	20050323	EP20030738821	20030610
EP1516214 B1	20080521	EP20030738821	20030610
SE200201945 A0	20020625	SE20020001945	20020625
US2006042432 AA	20060302	US20030519284	20030610
US2009224018 AA	20090910	US20090321697	20090122
US7896208 BB	20110301	US20090321697	20090122
WO04001466 A1	20031231	WO2003SE00949	20030610

Priority:
SE20020001945 20020625 WO2003SE00949 20030610 US20040519284 20041227
US20090321697 20090122

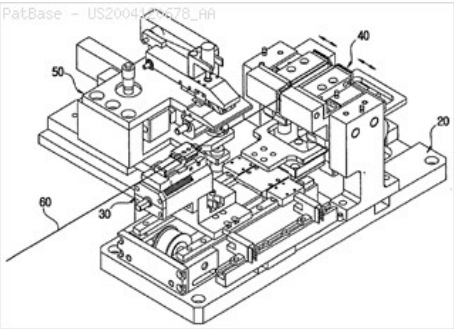
Probable Assignee: NYFORS TEKNOLOGI AB
Assignee(s): (std): BOETTCHER UWE ; BOTTCHER UWE ; NYFORS TEKNOLOGI AB
Inventor(s): (std): BOETTCHER UWE ; BOTTCHER UWE
Inventor(s): UWE BOETTCHER ; UWE BOTTCHER ; B AND XD6 TTCHER UWE
Agent(s): OLSSON JAN ET AL; DILWORTH AND BARRESE; DILWORTH AND BARRESE LLP
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: APPARATUS FOR CLEAVING OPTICAL FIBER

Abstract: Source: US2004120678A An apparatus to cleave an optical fiber includes a base plate, a jig slidably provided on the base plate and holding the optical fiber, a stripper provided near the jig, and including a hot plate heating a sheath of the optical fiber, a sheath cutter cleaving the sheath of the optical fiber to be stripped, a cleaning part cleaning the optical fiber after the sheath of the optical fiber is stripped according as the jig slides, and a cleaver provided on the base plate and cleaving the optical fiber whose sheath is stripped by the stripper. With this configuration, an apparatus is provided to cleave an optical fiber, in which stripping and cleaning processes are simultaneously performed in a stripper, so that the whole process of cleaving the optical fiber is decreased, and the structure of the apparatus is simplified without the conventional cleaning part.

Classifications:

International (IPC 8-9): G02B6/00 G02B6/245 G02B6/25 (Advanced/Invention); G02B6/25 (Advanced/Non-invention); G02B6/00 G02B6/245 G02B6/25 (Core/Invention)
International (IPC 1-7): B26F3/02 B65H35/10 G02B6/00 G02B6/24 G02B6/245 G02B6/25 G02B6/255 H02G1/12
CPC: Y10T225/20 Y10T225/217 Y10T225/218 Y10T225/307 G02B6/25 G02B6/245
European: G02B6/245 G02B6/25
US: 225/21 225/22 225/6 225/94 385/134 81/9.4 81/9.41 81/9.42 81/9.51 81/94.1 81/94.2 81/95.1



Family:

Publication number	Publication date	Application number	Application date
CN1229661 C	20051130	CN20031060242	20030928
CN1510446 A	20040707	CN20031060242	20030928
JP2004206077 A2	20040722	JP20030356863	20031016
KR100471083 B1	20050310	KR20020083346	20021224
KR20040056778 A	20040701	KR20020083346	20021224
US2004120678 AA	20040624	US20030658297	20030910
US6978071 BB	20051220	US20030658297	20030910

Priority:

KR20020083346 20021224

Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Assignee(s): (std): SAMSUNG ELECTRONICS CO LTD

Assignee(s): SAMSUNG ELECTRONICS CO

Inventor(s): (std): GON HWANG MYON SON SON HONG SO ; GON KIM RYONG ; HWANG MYEON SOON ; HWANG MYEON SUN ; KIN HEIKON ; KO BENJUN ; SEN HONSHAKU ; SOK SON HONG ; KIM BYEONG GON ; KIM BYUNG GON ; SON HWANG MYON ; SUN HONG SEOK ; SUN HONG SUK

Inventor(s): KIM RYONG GON ; SON HONG SOK ; HWANG MYON SON ; HWANG MYON SON SON HONG SOK KIM RYONG GON

Agent(s): STAAS AND HALSEY LLP

Title: METHOD AND SYSTEM FOR DETERMINING MECHANICAL STRAIN IN A MOBILE PHONE

Abstract: Source: US2004203500A A method and system for determining mobile phone strain is provided. The method includes the steps of determining if strain on a mobile phone housing and/or strain on a printed circuit board (PCB) within the mobile phone exceed a predetermined value. If the strain(s) values exceed the predetermined value an alarm may be sounded and the strain values may be stored in memory for later retrieval and/or analysis.

Classifications:

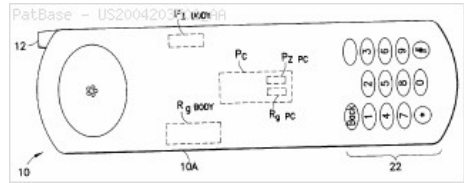
International (IPC 8-9): G01L5/00 H04B1/38 H04M1/18 (Advanced/Invention);
H04M1/725 (Advanced/Non-invention);
G01L5/00 H04B1/38 H04M1/18 (Core/Invention);
H04M1/72 (Core/Non-invention)

International (IPC 1-7): H04B1/38

CPC: G01L5/00 H04B1/3833 H04M1/18 H04M1/72519

European: G01L5/00 H04B1/38P2 H04M1/18 T04M1/725F

US: 455/550.1 455/575.1 455/90.3 455/903



Family:

Publication number	Publication date	Application number	Application date
US2004203500 AA	20041014	US20020109471	20020327
US7020503 BB	20060328	US20020109471	20020327

Priority:

US20020109471 20020327

Probable Assignee: NOKIA CORP

Assignee(s): (std): NOKIA CORP

Inventor(s): (std): PARFENIUK DEAN ; WONG JOHN P

Agent(s): HARRINGTON AND SMITH LLP

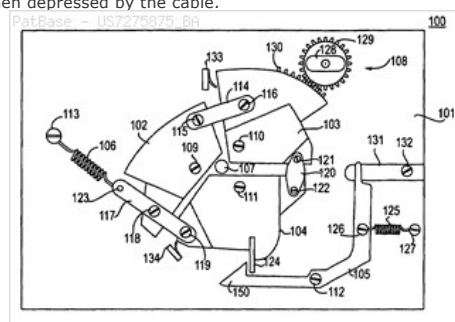
Abstract: Source: US7275875B A method and apparatus for a universal single handed light cable receptive port is disclosed. In one embodiment, a jaw assembly is coupled to a base. A latch is coupled to a base to hold the jaw assembly open and to define an aperture. When a cable is inserted into an aperture the latch is released and the jaw assembly is closed to secure the cable. In another embodiment, a release mechanism is coupled to a jaw assembly to open the jaw assembly to release the cable and engage the latch. In a further embodiment, an actuator is coupled to the base, the actuator is to receive cable and release the latch when depressed by the cable.

International (IPC 8-9): G02B6/42 (Advanced/Invention);
G02B6/42 (Core/Invention)

CPC: A61B1/00126 A61B1/00128 G02B6/4292 A61B1/00165 G02B2006/4297

European: A61B1/00F G02B6/42D K61B1/00S2 S02B6/42H2

US: 385/117 385/123 385/137 385/147 385/88



Publication number	Publication date	Application number	Application date
US7275875 BA	20071002	US20030698617	20031031

US20030698617 20031031

Probable Assignee: STRYKER CORP

Assignee(s): (std): STRYKER CORP

Inventor(s): (std): BANCHIERI MICHAEL J

Agent(s): BLAKELY SOKOLOFF TAYLOR AND ZAFMAN LLP

Title: APPARATUS AND METHOD FOR PROCESSING AT LEAST ONE OPTICAL WAVEGUIDE

Abstract: Source: US2010183273A An apparatus for processing at least one optical waveguide comprises a combination of a stripper, a cleaner and a cleaver. The stripper, the cleaner and the cleaver are adapted to remove a coating of the optical waveguide, clean and cleave the at least one optical waveguide. The apparatus comprises at least one sensor to determine a feature of the at least one optical waveguide.

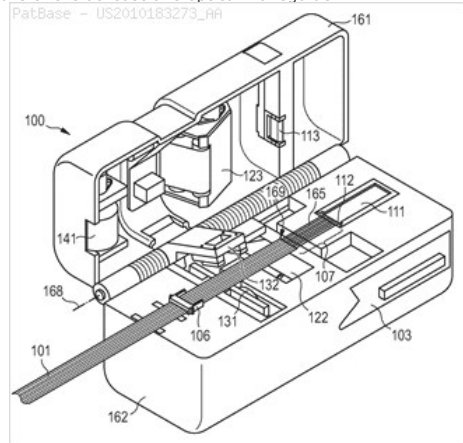
Classifications:

International (IPC 8-9): G02B6/00 G02B6/245 G02B6/25 (Advanced/Invention);
G02B6/00 G02B6/25 (Core/Invention)

CPC: G02B6/25 G02B6/245

European: G02B6/245 G02B6/25

US: 385/134 385/134P 385/136 385/137 385/147



Family:

Publication number	Publication date	Application number	Application date
DE602009019737 D1	20131224	DE200960019737T	20090119
EP2209026 A1	20100721	EP20090150876	20090119
EP2209026 B1	20131030	EP20090150876	20090119
US2010183273 AA	20100722	US20100685356	20100111
US2013129294 AA	20130523	US20120718070	20121218
US8346042 BB	20130101	US20100685356	20100111
US8676021 BB	20140318	US20120718070	20121218

Priority:

EP20090150876 20090119 US20100685356 20100111 US20120718070 20121218

Probable Assignee: CCS TECHNOLOGY INC

Assignee(s): (std): CCS TECHNOLOGY INC ; HEIDLER CHRISTIAN ; KOSSAT RAINER M ; KOSSAT RAINER MATTHIAS

Assignee(s): CCS TECHNOLOGY INC WILMINGTON

Inventor(s): (std): HEIDLER CHRISTIAN ; KOSSAT RAINER ; KOSSAT RAINER M ; KOSSAT RAINER MATTHIAS

Inventor(s): KOSSAT RAINER 83229 ; HEIDLER CHRISTIAN 80337

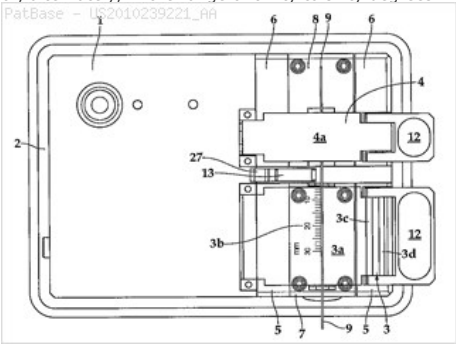
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Designated states: AL BA DE ES FR GB IT RS

Title: FIBER CLEAVING DEVICE

Abstract: Source: US2010239221A A fiber cleaving device comprising a clamp assembly, central moveable stage, right moveable stage, and diamond component. The diamond component comprises a diamond and a diamond oscillator. The clamp assembly secures a piece of bare glass fiber so that it is oriented roughly perpendicularly to the cutting edge of the diamond. The central moveable stage moves the diamond oscillator forward so that the cutting edge of the diamond comes into contact with the piece of bare glass fiber. The right moveable stage pulls the piece of bare glass fiber taught after it has been secured by the clamp assembly. The diamond oscillator is configured so that the diamond cleaves the piece of bare glass fiber at an effective cutting angle of approximately forty-five degrees or, alternately, in the range of thirty to sixty degrees.

Classifications:
International (IPC 8-9): G02B6/00 (Advanced/Invention);
G02B6/00 (Core/Invention)
CPC: G02B6/25
European: G02B6/25
US: 385/136



Family:

Publication number	Publication date	Application number	Application date
US2010239221 AA	20100923	US20090408090	20090320

Priority:
US20090408090 20090320

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