

James M. Smedley, 03613-2008  
James M. Smedley, LLC  
[James.Smedley@sigmalawgroup.com](mailto:James.Smedley@sigmalawgroup.com)  
776 Mountain Blvd STE 105  
Watchung, NJ 07069  
Telephone 732.481.0587  
Facsimile 732.490.6616

Attorneys for Plaintiff  
SLICE, INC.

**IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY**

SLICE, INC.,

Plaintiff,

vs.

ACME UNITED CORPORATION;  
WESTCOTT; OFFICE DEPOT, INC.; and  
DOES 1-10,

*Defendants.*

**CASE NUMBER**

**FIRST AMENDED COMPLAINT FOR  
PATENT INFRINGEMENT**

**JURY TRIAL DEMANDED**

Plaintiff Slice, Inc., (“Plaintiff” or “Slice”), by counsel, complains and alleges as follows against Defendants Acme United Corporation, Westcott and the defendants identified herein as Does 1 through 10 (collectively referred to as “Defendants”).

**NATURE OF THE ACTION**

88. This is an action for patent infringement under the patent laws of the United States, Title 35, of the United States Code, arising from, Defendants’ infringement of the U.S.

Pat No. 9,579,808 (“the ’808 patent”), U.S. Patent No. 9,925,674 (“the ’674 patent”), and the U.S. Design Patent No. D636,646 (the “D ’646”)

**PARTIES**

89. Plaintiff Slice, Inc. (hereinafter “Slice”) is a Delaware corporation, having its principal place of business at 38 N. Almaden Blvd., Unit 115, San Jose, California, 95110. Slice is a developer of unique and high quality cutting tools sold in higher value stores where customers appreciate Slice innovations.

90. Slice is informed and believes, and based thereon alleges, that Defendant Acme United Corporation (hereinafter “Acme”) is a Connecticut corporation, with its principal place of business at 55 Walls Drive, Suite 201, Fairfield, Connecticut, 06824. Upon Slice’s information and belief, Acme has been producing products since 1867 and is a worldwide supplier of cutting and first-aid products in various markets.

91. Westcott (hereinafter “Westcott”) is a corporation organized and domiciled in the State of Delaware with its principle place of business at 55 Walls Drive, Fairfield, CT 06824.

92. On information and belief, Westcott is a wholly-owned subsidiary of Acme.

93. On information and belief, both Acme and Westcott are registered with the State of New Jersey Division of Revenue and Enterprise Services as either domestic or foreign corporations, including at least as Entity Nos.: 0100507241 and 0100355412 respectively.

94. Slice is informed and believes, and based thereon alleges, that Defendant Office Depot, Inc. (hereinafter “Office Depot”) is a Delaware corporation, with its principal place of business at 6600 North Military Trail, Boca Raton, Florida 33496. Upon Slice’s information and belief, Office Depot has been a retailer of office supplies and other goods and services since at least 1986. Upon Slice’s information and belief, Office Depot operates retail stores in the United States, under the names Office Depot and OfficeMax, several of which are located in New Jersey.

95. On information and belief, Office Depot is registered with the state of New Jersey Division of Revenue and Enterprise Services as a foreign corporation, including at least as Entity No.: 0100619685.

96. Slice is presently unaware of the true names and capacities of Defendants sued herein as Does 1 through 10 (the “Doe Defendants”), inclusive, and therefore sues the Doe Defendants by such fictitious names. Slice is informed and believes, and based thereon alleges, that each of the fictitiously named Doe Defendants is legally responsible in some manner for the occurrences herein alleged, and in infringing Slice’s intellectual property rights and other alleged violations of law. Slice will amend this Complaint to allege their true names and capacities when ascertained.

### **JURISDICTION**

97. This action arises under the Patent Laws of the United States of America, 35 U.S.C. § et. Seq. The Court has federal question jurisdiction under 28 U.S.C. § 1331 and 28 U.S.C. § 1338(a) because this is a civil action arising under the Patent Act and 28 U.S.C. § 1367 (supplemental jurisdiction).

98. The Court has personal jurisdiction over Acme, Westcott, Office Depot and the Doe Defendants (collectively, the “Defendants”) because the Defendants have committed and continue to commit acts of infringement in violation of 35 U.S.C. § 1 et. seq., and place infringing products into the stream of commerce, with the knowledge that such products are sold in the State of New Jersey, including in this District. Defendants have substantial dealings in the State of New Jersey including retail sales locations across the state and sales representatives engaged in selling products in the state. The acts by the Defendants cause injury to Slice within this District. Upon information and believe, the Defendants derive revenue from the sale of infringing products within this District, expect their actions to have consequences within this District, and derive revenue from interstate and international commerce.

99. Alternatively, this Court has general and/or specific jurisdiction over all the defendants, because pursuant to the facts below, they are alter-egos of one another and all agents of Acme and have conducted and continue to conduct substantial business in this District, through their sales personnel and by offering their infringing products, thus purposefully availing themselves of the benefits of New Jersey’s laws and the privilege of conducting business in New

Jersey thereby infringing Slice's '808 patent, '674 patent, and the D '646. Slice has suffered injury in New Jersey and elsewhere nationwide.

### **VENUE**

13. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b) and (c) because the Defendants transact business within this district, have several regular and established places of business in this district by way of numerous retail outlets, and the Defendants carry and offer for sale in this district products that infringe Slice's '808, '674, and D'646 patents. In addition, venue is proper because Slice sells and distributes its products in this district and the continuing infringement by the Defendants here in New Jersey renders harm to Slice thereby damaging Slice.

### **FACTUAL ALLEGATIONS**

14. Plaintiff realleges and incorporates by reference the allegations of paragraphs 1 - 11 of this Complaint.

15. Slice is a manufacturer and distributor of primarily ceramic-blade cutting tools that are safe, reliable, comprised of distinctive and aesthetically pleasing shapes and designs, and are contained in distinctive and aesthetically pleasing packaging.

16. Founded in 2008, Slice has since revolutionized the cutting industry by making cutting tools featuring ceramic blades that are significantly safer and longer lasting than traditional steel blades. Slice has also taken great care to create aesthetically pleasing products, using world-renowned and influential designers like Karim Rashid, Michael Graves, and Yves Behar to create sleek, beautiful products with a specific, distinctive look.

17. Slice's creative achievements have resulted in broad intellectual property protection for Slice's innovations, including utility and design patents, trademarks, and trade dress protection. Slice is a pioneer and leader in the market for cutting tools with ceramic blades.

18. Slice's cutting tools are sold under the name "Slice" and are distributed in over 40 countries worldwide. Slice has sold tens of millions of units of its cutting tools worldwide.

Slice's cutting tools are used by more than half of the Fortune 1000 companies, allowing them to lower costs and reduce risks of lacerations due to Slice's unique designs, which have been developed over the past ten years at great expense to Slice.

19. Slice's cutting tools are high end products and are leaders within the industrial and safety, art supply, school and craft markets.

20. Cutting tools offered for sale by Slice include, but are not limited to, pen cutters, pocket in cutters, safety cutters, letter openers, utility knives and, in each case, ceramic blades for use therewith.

21. Slice donates a minimum 1% of corporate worldwide sales to various autism research programs that have global ramifications for families and individuals that live with autism on a daily basis. Slice also encourages corporate and individual donations directly to key research benefactors at the Autism and Developmental Disabilities Clinic, Lucile Packard Children's Hospital at Stanford University in Palo Alto, California.

22. Slice has been offering for sale its pocket (or mini) cutter (the "Slice Mini Cutter") since at least as early as January 2013 and in the State of New Jersey particularly.

23. The Slice Mini Cutter, is designed in a unique, distinctive, and aesthetically pleasing manner that is readily identifiable by consumers on account of various design elements, including design elements identified in this Complaint.

24. In order to create the unique and distinctive Slice Mini Cutter, Slice hired world-renown designers including Yves Behar, Michael Graves, Scot Herbst, and Karim Rashid. Slice products regularly win prestigious awards for their utility and design.

25. On February 28, 2017 the United States Patent and Trademark Office ("USPTO") duly and legally issued the United States Patent No. 9,579,808 ("the '808 patent") entitled "Pocket Cutter." At the time of issue, the '808 patent was assigned to Slice which currently has all right, title and interest in and to the '808 patent, which claims a pocket cutter apparatus with a retractable blade. The '808 patent is a continuation of United States Provisional Patent Application No. 61/739,712 filed on December 19, 2012. Attached hereto as Exhibit A (and replicated below) is a true and correct copy of the '808 patent to Slice by the USPTO.

26. On March 27, 2018 the USPTO duly and legally issued the United States Patent No. 9,925,674 (“the ‘674 patent”) entitled “Pocket Cutter”. At the time of issue, the ‘674 patent was assigned to Slice which currently has all right, title and interest in and to the ‘674 patent, which claims a pocket cutter apparatus with a retractable blade. The ‘674 patent is a continuation of the ‘808 patent. Attached hereto as Exhibit C (and replicated below) is a true and correct copy of the ‘674 patent to Slice by the USPTO.

27. The Pocket Cutter as claimed in both the ‘808 patent and the ‘674 patent is shown below.



28. Slice markets the Pocket Cutter under the name of “Slice Mini Cutter” and it has been continuously used in interstate commerce (and worldwide) since August 2012.

29. On or around May 29, 2014, Slice entered into discussions with Stanley Black & Decker, Inc., (“Stanley”) a world-leading provider of tools and storage, commercial electronic security and engineered fastening systems and Fortune 500 company regarding a potential product purchase and licensing arrangement between Slice and Stanley. The discussions were with Stanley’s Product Marketing team, which consisted of approximately 5 – 6 persons. During the discussions, Slice furnished information concerning its pending applications, patents, and products.

30. Upon information and belief, Stanley’s Product Marketing team at the time of discussions included Chris Alagno in the role of Director of Product Marketing. See Exhibit D.

31. On May 1, 2015, Slice and Stanley entered into the Stanley Master Purchase Agreement in which Stanley purchased several cutting tools from Slice including the Pocket Cutter, marketed as the Slice Mini Cutter.

32. Slice is informed and believes, and based thereon alleges, that, on or about January 20, 2015, Mr. Alagno, now a Vice President at Acme, initiated contact with Slice by phone to begin discussions related to potential business opportunities between Slice and Acme. *See Exhibit E.* The potential business opportunities that Mr. Alagno discussed with Slice included a possible licensing arrangement of Slice products to Acme. In fact, pursuant to such discussions, Mr. Alagno provided Slice with potential product mock-ups showing how the Slice products would be packaged under the Acme/Westcott name. *See Exhibit F.*

33. Upon Slice's information and belief, Mr. Alagno joined Acme in or around December 2014. Upon Slice's information and belief, prior to joining Acme, Mr. Alagno was Director of Product Marketing at Stanley, the same group with whom Slice communicated leading to the Stanley Master Purchase Agreement. *See Exhibit D.* While Mr. Alagno was at Stanley, Slice and Stanley were in discussions regarding a potential purchase and licensing arrangement between Slice and Stanley, which discussions ultimately resulted in the execution of the Stanley Master Purchase Agreement. Upon Slice's information and belief, Mr. Alagno became aware of the Pocket Cutter and/or the discussions between Slice and Stanley during his employment with Stanley, as Mr. Alagno was in the same business group of Stanley that worked on and executed the Stanley Master Purchase Agreement.

34. In order to further discussions of potential business opportunities, Slice and Acme executed a mutual non-disclosure agreement on January 21, 2015 (hereinafter, the "NDA"), attached hereto as Exhibit G. The NDA prohibited a party receiving confidential information from "furnish[ing] to any third party any information, equipment or material embodying or made by use of any Confidential Information received or developed hereunder nor use such information for purposes other than internal evaluation...." (*See* paragraph 2 of the NDA).

35. Pursuant to that NDA, in or around January 2015, Slice sent Acme samples of its product line which included the Pocket Cutter, the infringed product in this dispute.

36. Pursuant to the NDA, Slice disclosed to Acme certain confidential information about the Slice, including but not limited to, production costs, product specifications, and other information related to and associated with Slice's business.

37. Slice is informed and believes, and based thereon alleges, that Acme expressed interest in purchasing and/or licensing certain cutting tools developed, manufactured, and sold by Slice. In particular, Acme was interested in developing Westcott products utilizing, at least, the Pocket Cutter. In fact, on or about January 28, 2015, Acme created materials showing the appearance of the Pocket Cutter, and other Slice products. *See Exhibit F.*

38. Subsequently and after Acme had received all the confidential information from Slice about its products, business and marketing, Mr. Alagno cancelled a meeting with Slice at Slice's offices scheduled for January 28, 2015—a meeting Mr. Alagno specifically requested and scheduled. Mr. Alagno never rescheduled the meeting with Slice.

39. After the cancellation of the January 28, 2015 meeting, T.J. Scimone, Founder and Chief Executive Officer of Slice, followed up with Mr. Alagno regarding the status of any potential business arrangement between Slice and Acme. On or about March 3, 2015, Mr. Alagno responded that he was concerned about the relatively high price point of the Slice Tools. However, Mr. Alagno never asked Slice to work with Acme on the price and/or costs of any of the Slice Tools Acme was interested in purchasing and/or licensing.

40. Slice is informed and believes, and based thereon alleges, that Slice became aware in or around August 2016 that Acme began advertising and promoting certain ceramic cutting tools, including (the "Westcott Mini Cutter" or "Westcott Utility Cutter" as the case may be and hereinafter the "Accused Product")

41. Upon information and belief, the Accused Product was first sold by Acme in January 2016. Sales of the Accused Product continue to date through various channels, such as through Defendant Office Depot's Office Depot and OfficeMax stores.

42. Slice alleges, that as part of their promotion and sales distribution efforts in the United States, Defendants have improperly, and without authorization, willfully and knowingly infringed the '808 and the '674 patent.



43. Slice is informed and believes, and based thereon alleges, that as part of their promotions and sales distribution efforts in the United States, Defendants have improperly, and without authorization, willfully and knowingly infringed on the '808 patent and the '674 patent.

44. This image, for example, ("FIGURE 1") shows the Pocket Cutter (Slice Mini Cutter) right side side-by-side with the infringing Westcott analogue known as the Utility Cutter (the Accused Product) left side<sup>1</sup>. The similarity is startling.



45. Slice also owns design patent D636,646 (the "D'646 Patent") entitled "Utility Blade" which was duly issued by the United States Patent Office on April 26, 2011. Attached hereto is a true and correct copy of the D 646 Patent as Exhibit B. This Patent covers the aesthetic appearance of a useful article described in the design patent application.

## COUNT I

### INFRINGEMENT OF U.S. PATENT NO. 9,579,808

46. Plaintiff realleges and incorporates by reference the allegations of paragraphs 1 – 45 of this Complaint.

47. Defendants' Accused Product has directly infringed and continues to directly infringe the '808 patent, pursuant to 35 U.S.C. § 271(a), literally or by equivalence, and

---

<sup>1</sup> As discussed in detail below, Acme filed for a patent application for the Accused Product pursuant to Provisional Application 62/141,528 on April 1, 2015.

indirectly through inducement and contributory infringement of claim 1 of the '808 patent by practicing and continuing to practice, one or more claims of the '808 patent by using the Accused product. The following specific allegations detail the acts of direct, induced and contributory infringement by each named defendant.

48. Defendants' Accused Product has infringed and continues to infringe at least Claim 1 of U.S. Pat. No. '808. Claim 1 recited:

1. A pocket cutter, comprising
  - a. a housing,
  - b. a blade carrier disposed within said housing, said blade carrier having an exterior side and an interior side and being configured to retain a retractable blade on its interior side,
  - c. a thumb slider switch operably connected to said blade carrier and configured to move said blade carrier transversely along a transverse groove in said housing.
  - d. said thumb slider switch comprising a connector post that connects said thumb slider switch to said blade carrier and is configured to travel along said transverse groove, said connector post having an aperture defined therein, said connector post extending through said transverse groove and through a corresponding slot in said blade carrier such that said connector post aperture extends beyond said blade carrier slot to the interior side of said blade carrier.
  - e. a spring mounted to a wall of said housing wherein said spring comprises a short arm and long arm, wherein said long arm extends through the connector post aperture on the interior side of said blade carrier, thereby securing said thumb slider switch to said blade carrier and imparting a biasing force to said blade carrier that provides resistance against moving the blade carrier forward to deploy a blade and biases the blade carrier to a retract position with the housing.

49. Defendant's Accused Product includes a housing that contains a blade carrier with an exterior and interior side within said housing, such blade carrier being configured to retain a retractable blade on the interior side.

50. Defendant's Accused Product includes a thumb slider switch connected to the blade carrier permitting the blade to transverse along a groove in said housing.

51. Defendant's Accused Product includes a thumb slider switch with a connector post connecting the blade carrier to the thumb slider switch permitting the carrier to travel along the transverse groove by virtue of it extending through the transverse groove.

52. Defendant's Accused Produce includes a spring mounted to the wall of said housing wherein said spring has a short and long arm, wherein said long arm extends through connector post aperture.

#### Induced Infringement by Defendants

53. On information and belief, Defendants are liable for their induced infringement of the '808 patent pursuant to 35 U.S.C. § 271 (b). Specifically, Defendants have actively, knowingly and intentionally induced infringement of at least claim 1 of the '808 patent by selling the Accused Product to consumers in contravention of the '808 patent with the specific intent that customers will use it to infringe at least Claim 1 of the '808 patent.

54. First, on information and belief, Defendants have induced infringement by creating distribution channels for the sale of the Accused Product with the knowledge and specific intent that its customers will use it to perform infringement acts of Claim 1.

55. Second, on information and belief, Defendants have induced infringement by distributing instructional materials accompanying the sale of the Accused Product with the knowledge and the specific intent to encourage and facilitate infringing sales.

#### Contributory infringement by Defendants

56. On information and belief, Defendants, are liable for contributory infringement of the '808 patent pursuant to 35 U.S.C. § 271 (c) by encouraging others to make and manufacture the components of the Accused Product.

57. On information and belief, Defendants' infringement has been willful and deliberate in that Defendants executed an NDA, inducing Slice to share its sensitive confidential information with Defendants only to later learn of Defendants' obvious use of that information to infringe Slice through the Accused Product. There is an objectively high likelihood that Defendants' actions constituting infringement of a valid patent was known or at least so obvious that it should have been known to Defendants, yet defendants turned a willfully blind eye to this.

58. Defendants' infringement of the '808 patent has injured Slice in its business and its property rights, causing Slice to lose profits on sales of its own goods associated with the '808 patent, and Slice is entitled to recovery of monetary damages, including lost profits, for these injuries pursuant to 35 U.S.C. § 284 in an amount to be determined at trial.

59. Defendants' infringement of the '808 patent has caused irreparable harm to Slice, including lost profits, and will continue to cause such harm unless and until their infringing activities are enjoined by this Court.

## **COUNT II**

### **INFRINGEMENT OF U.S. PATENT NO. 9,925,674**

60. Plaintiff re-alleges and incorporates by reference the allegations of paragraphs 1 – 59 of this Complaint.

61. Defendants' Accused Product has directly infringed and continues to directly infringe the '674 patent, pursuant to 35 U.S.C. § 271(a), literally or by equivalence, and indirectly through inducement and contributory infringement of claim 1 of the '674 patent by practicing and continuing to practice, one or more claims of the '674 patent by using the Accused product. The following specific allegations detail the acts of direct, induced and contributory infringement by each named defendant.

62. Defendants' Accused Product has infringed and continues to infringe at least Claim 1 of U.S. Pat. No. '674. Claim 1 recited:

- (1) A blade actuation control unit for the use in pocket cutter, the blade actuation control unit comprising:

- (a) a slider button connected to a blade carrier by a connector post, wherein said slider button is configured to move said blade carrier transversely along a transverse groove of a housing;
- (b) wherein said connector post includes an aperture and wherein said connector post extends through said transverse groove of said housing and through a slot in said blade carrier such that said aperture extends beyond said blade carrier slot to an interior side of said blade carrier; and
- (c) a tension component, wherein said tension component includes a short arm and a long arm, wherein said long arm extends through the connector post aperture on said interior side of said blade carrier.

63. Defendant's Accused Product includes a housing that holds a slider button. A view of the interior of the Accused Product reveals that the slider button is connected to a blade carrier through a connector post. Furthermore, the slider button of the Accused Product moves transversely along a traverse groove and through a slot in the blade carrier so that the aperture within the connector post extends beyond the blue carrier slot to an interior side of the blade carrier. Lastly, the interior of the Accused Product includes a tension component with a short arm and a long arm so that the long arm extends through the connector post aperture.

64. In brief, Defendant's Accused Product includes a slider button, a blade carrier with a slot, a connector post (with an aperture), a slider button, and a traverse groove on the housing. Internally, Defendant's Accused Product comprises of a tension component with both a short arm and a long arm. Collectively, each element is a reproduction of the Plaintiff's claimed inventions.

#### Induced Infringement by Defendants

65. On information and belief, Defendants are liable for their induced infringement of the '674 patent pursuant to 35 U.S.C. § 271(b). Specifically, Defendants have actively, knowingly and intentionally induced infringement of at least claim 1 of the '674 patent by selling the Accused Product to consumers in contravention of the '674 patent with the specific intent that customers will use it to infringe at least Claim 1 of the '674 patent.

66. First, on information and belief, Defendants have induced infringement by creating distribution channels for the sale of the Accused Product with the knowledge and specific intent that its customers will use it to perform infringement acts of Claim 1.

67. Second, on information and belief, Defendants have induced infringement by distributing instructional materials accompanying the sale of the Accused Product with the knowledge and the specific intent to encourage and facilitate infringing sales.

Contributory infringement by Defendants

68. On information and belief, Defendants, are liable for contributory infringement of the '674 patent pursuant to 35 U.S.C. § 271 (c) by encouraging others to make and manufacture the components of the Accused Product.

69. On information and belief, Defendants' infringement has been willful and deliberate in that Defendants executed an NDA, inducing Slice to share its sensitive confidential information with Defendants only to later learn of Defendants' obvious use of that information to infringe Slice through the Accused Product. There is an objectively high likelihood that Defendants' actions constituting infringement of a valid patent was known or at least so obvious that it should have been known to Defendants, yet defendants turned a willfully blind eye to this.

70. Defendants' infringement of the '674 patent has injured Slice in its business and its property rights, causing Slice to lose profits on sales of its own goods associated with the '674 patent, and Slice is entitled to recovery of monetary damages, including lost profits, for these injuries pursuant to 35 U.S.C. § 284 in an amount to be determined at trial.

71. Defendants' infringement of the '674 patent has caused irreparable harm to Slice, including lost profits, and will continue to cause such harm unless and until their infringing activities are enjoined by this Court.

**COUNT III**

**INFRINGEMENT OF THE D'646 PATENT**

72. Slice re-alleges and incorporates by reference and every allegation of the paragraph 1 through 71 of this Complaint as if fully set forth herein.

73. On information and belief, rather than innovate and develop their own utility blade, Defendants deliberately and willfully chose to copy Slice's designs for their utility blade to profit from Slice's success. Defendants willfully and deliberately infringed on Slice's D '646 Utility Patent.

74. As shown by the side by side comparison below, Defendants' Accused Product Utility Blade infringes the design claimed in Slices D'646 Patent in that it is the same or substantially identical to the design claimed in D '646 Patent.



75. An ordinary observer of the Utility Blades side by side would be deceived into believing that the Accused Product's Utility Blade sold by the Defendants is the same as the patent design of the D '646 Patent. In fact, the Utility Blades are so similar, that on June 30, 2017, an examiner at the United States Patent and Trademark (USPTO) cited the D '646 Patent as prior art against the Acme Application for their product.

76. As a result of Defendants' acts of infringement, Slice has suffered and will continue to suffer damages, including lost profits, in an amount to be proven at trial.

#### **COUNT IV**

#### **WILLFUL INFRINGEMENT**

77. Slice re-alleges and incorporates by reference each and every allegation of

paragraphs 1 through 76 of this Complaint as if fully set forth herein.

78. 35 U.S.C. § 284 provides in pertinent part as follows: “When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.”

79. 100. 35 U.S.C. § 285 provides, “the court in exceptional cases may award reasonable attorney fees to the prevailing party.”

80. From at least January 21, 2015, which is the date that Slice and Acme entered into the NDA, Acme had knowledge of Slice’s patent application. In furtherance of a business relationship between Slice and Acme, Slice furnished Acme with the patent application that resulted in the ‘808 and ‘674 patents. Accordingly, Acme was on notice that Slice was at least pursuing patent protection for its Pocket Cutter, and had provisional rights in the application.

81. Despite knowledge of Slice’s application and provisional rights, Acme filed its own provisional application for a safety cutter with ceramic blade on April 1, 2015<sup>2</sup>, approximately one month after rejecting a business partnership with Slice. *See Exhibit H.*

82. The similarity between Acme’s Accused Product and Slice’s Pocket Cutter is uncanny, especially considering the time frame in which Acme filed for its patent application.

83. Accordingly, from at least the date of execution of the NDA, Acme was aware of Slice’s application and therefore should have known what the claims for the application to the ‘808 patent covered. Slice is of information and belief that Acme used Slice’s applications (along with Slice’s confidential information) to file its own application for an identical product.

84. In the alternative, Acme was aware of Slice’s patent applications (including such applications that matured into registration for the D ‘646 patent) at least as early as June 30, 2017 when the Acme Application was issued a non-final rejection (i.e. non-final office action). *See Exhibit I.* The Examiner cited the D ‘646 patent in support of a §103 rejection for the ceramic

---

<sup>2</sup> Acme’s April 1, 2015 provisional application was converted into a non-provisional application, US15/088,325 on April 1, 2016 with United States Publication No. US2016/0288345A1 (“Acme Application”).



blade.

85. Similarly, on January 30, 2018, the Acme Application was finally rejected under 35 U.S.C. §103 over US Patent 5,813,121 in view of Slice's application for the '808 patent.<sup>3</sup>

86. Defendants have continued their infringing conduct without modification or moderation, without compensation to Slice, and without any legal justification, thereby demonstrating their indifference to legal obligations and the property rights of Slice.

87. Defendants continued infringement, since at least the execution of the NDA (or in the alternative, upon receipt of the non-final action for the Acme Application) is willful and deliberate, entitling Slice to increased damages under 35 U.S.C. § 284.

88. Furthermore, Defendants continued reckless or intentional infringement since at least the execution of the NDA (or in the alternative, upon receipt of the non-final action for the Acme Application) renders this an extraordinary case under 35 U.S.C. § 2845, which entitles Slice to an award of reasonable attorney's fees.

#### **COUNT IV**

#### **BREACH OF NON-DISCLOSURE AGREEMENT**

89. Slice re-alleges and incorporates by reference each and every allegation of paragraphs 1 through 88 of this Complaint as if fully set forth herein.

90. On or about January 21, 2015, Slice and Acme entered into the NDA, a valid and enforceable contract. *See Exhibit G.*

91. Slice performed all of its obligations under the NDA.

92. In or around January 2015, Slice sent Acme samples of various Slice products, including the Pocket Cutter.

93. In or around January 2015, Slice disclosed to Acme certain confidential information about the Slice Tools, including the Pocket Cutter. Such confidential information included business intelligence especially relevant for manufacturing and distributing Slice

---

<sup>3</sup> The office action publication number for the '808 patent is U.S. Publication 2014/0173912.

products, such as production costs and production specifications.

94. Slice is informed and believes, and based thereon alleges, that Acme used Slice's confidential information to apply for its own patent application.

95. Accordingly, on or before April 1, 2015<sup>4</sup>, Acme breached the NDA Section (2) by "us[ing] [Confidential Information] other than internal evaluation.

96. Acme acted to breach this and other sections of the NDA as they surreptitiously plotted to infringe the '080 patent using Slice's own confidential information.

97. Slice continues to perform its obligations under the NDA.

98. As a direct and proximate result of Acme's continuing breaches of the NDA, Slice has suffered, and will continue to suffer, damages in an amount to be proven at trial.

#### **COUNT IV**

#### **QUASI CONTRACT AGAINST DEFENDANTS**

99. Slice re-alleges and incorporates by reference each and every allegation of paragraphs 1 through 98 of this Complaint as if fully set forth herein.

100. As a result of the conduct alleged herein, Defendants have received a benefit in the form of ill-gotten gains and profits.

101. As a result of the conduct alleged herein, Defendant unjustly retained a benefit at the expense of Slice, and Defendants have been unjustly enriched to Slice's detriment. Slice seeks a worldwide accounting and disgorgement of all ill-gotten gains and profits resulting from Defendants' inequitable activities and/or Slice's lost profits due to their inequitable conduct.

#### **PRAYER FOR RELIEF**

**WHEREFORE**, Plaintiff prays for judgment against Defendants follows:

---

<sup>4</sup> This is the filing date of Acme's provisional application

- A. Judgment that Defendants have infringed the '808 patent;
- B. Judgment that Defendants have infringed the '674 patent;
- C. Judgement that Defendants have infringed the D '646 patent
- D. An order preliminarily and permanently enjoining Defendants and their officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents and all others acting in active concert with them from further infringement of the '808 patent and the D'646 patent;
- E. An award of damages pursuant to 35 U.S.C. § 284, including damages to compensate Slice for the Defendants' infringement, including all compensatory damages and loss profits;
- F. A declaration that Defendants' infringement was willful and deliberate, and an increase to the award of damages of three times the amount found or assessed by the Court, in accordance with 35 U.S.C. § 284.
- G. An order for an account of damages from Defendants' infringement;
- H. Attorney fees in this action as an exception case pursuant to 35 U.S.C. § 285;
- I. Costs and expenses in this action.
- J. Such other and further relief as the Court deems just and proper

**JAMES M SMEDLEY LLC**

A Limited Liability Company  
Attorneys for Plaintiff, National Christmas  
Products, d/b/a National Tree Company

Respectfully submitted,

By: /S/ James M. Smedley  
james.smedley@sigmalawgroup.com

James M. Smedley, Esq.  
Honeah Mangione, Esq.

Dated: June 22, 2018

**TRIAL BY JURY DEMANDED**

Pursuant to Federal Rule of Civil Procedure 38, Slice hereby demands a jury trial on all issues so triable.

**JAMES M SMEDLEY LLC**

A Limited Liability Company  
Attorneys for Plaintiff, National Christmas  
Products, d/b/a National Tree Company

Respectfully submitted,

By: /S/ James M. Smedley  
james.smedley@sigmalawgroup.com

James M. Smedley, Esq.  
Honeah Mangione, Esq.

Dated: June 22, 2018

**CERTIFICATION PURSUANT TO L. CIV. R. 11.2**

Plaintiff Slice Inc., by its undersigned attorneys, hereby certifies pursuant to Local Civil Rule 11.2 that the matter in controversy is not the subject of any other action pending in any court, pending arbitration or administrative proceeding.

Respectfully

[insert attorney name here]

Date:

**VERIFICATION**

I, T.J. Scimone, hereby verify that

1. I am the founder of Slice Inc., the plaintiff in this action.
2. I have reviewed the foregoing Verified Complaint.
3. I verify under penalty of perjury that the facts set forth in the Verified Complaint are true and correct to the best of my knowledge.

Executed on \_\_\_\_\_, 2018 in San Jose, California

\_\_\_\_\_  
T.J. Scimone, President  
Slice Inc.

# EXHIBIT A

US009579808B2

(12) **United States Patent**  
**Scimone et al.**

(10) **Patent No.:** **US 9,579,808 B2**

(45) **Date of Patent:** **Feb. 28, 2017**

(54) **POCKET CUTTER**

(56) **References Cited**

(71) Applicants: **Thomas Scimone**, Campbell, CA (US);  
**Scott Herbst**, San Jose, CA (US);  
**Bruce Allen Eisenhauer**, Du Quoin, IL (US)

(72) Inventors: **Thomas Scimone**, Campbell, CA (US);  
**Scott Herbst**, San Jose, CA (US);  
**Bruce Allen Eisenhauer**, Du Quoin, IL (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 371 days.

(21) Appl. No.: **14/106,678**

(22) Filed: **Dec. 13, 2013**

(65) **Prior Publication Data**

US 2014/0173912 A1 Jun. 26, 2014

**Related U.S. Application Data**

(60) Provisional application No. 61/739,712, filed on Dec. 19, 2012.

(51) **Int. Cl.**  
**B26B 5/00** (2006.01)  
**B26B 1/00** (2006.01)  
**B26B 1/08** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **B26B 5/003** (2013.01); **B26B 1/00** (2013.01); **B26B 1/08** (2013.01)

(58) **Field of Classification Search**  
CPC ..... B26D 5/003; B26D 1/08; B26B 1/00  
USPC ..... 30/162, 335, 164, 2  
See application file for complete search history.

**U.S. PATENT DOCUMENTS**

2,644,230 A \* 7/1953 Anderson ..... B26B 5/006 30/151  
3,192,624 A \* 7/1965 Gringer ..... B26B 5/001 30/162  
4,281,458 A \* 8/1981 Okada ..... B26B 5/001 30/162  
6,219,923 B1 \* 4/2001 Sinisi ..... B26B 5/001 30/162  
6,516,520 B1 \* 2/2003 Liao ..... B43M 7/002 30/162  
6,543,140 B1 \* 4/2003 Davis ..... B26B 29/02 30/162  
7,155,829 B1 \* 1/2007 Sun ..... B26B 5/003 30/125

**FOREIGN PATENT DOCUMENTS**

TW EP 2700482 A1 \* 2/2014 ..... B26B 1/08

\* cited by examiner

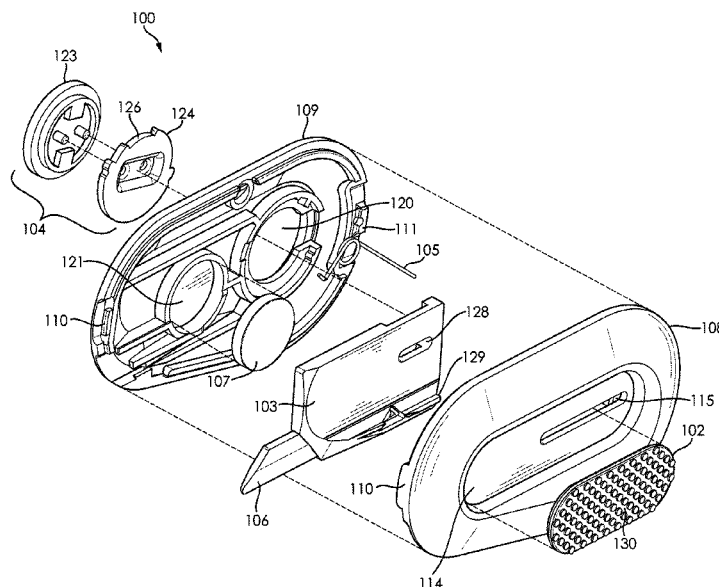
*Primary Examiner* — Omar Flores Sanchez

(74) *Attorney, Agent, or Firm* — James M. Smedley LLC; James Michael Smedley, Esq.

(57) **ABSTRACT**

A pocket cutter knife with a retractable cutting blade that is operated via a blade control unit. The blade control unit includes a thumb slider switch, a blade carrier, and a tension component that are operably connected to extend and retract a cutting blade that is held by the blade carrier. The pocket cutter may also include a magnet retained within the body shell of the pocket cutter.

**12 Claims, 8 Drawing Sheets**

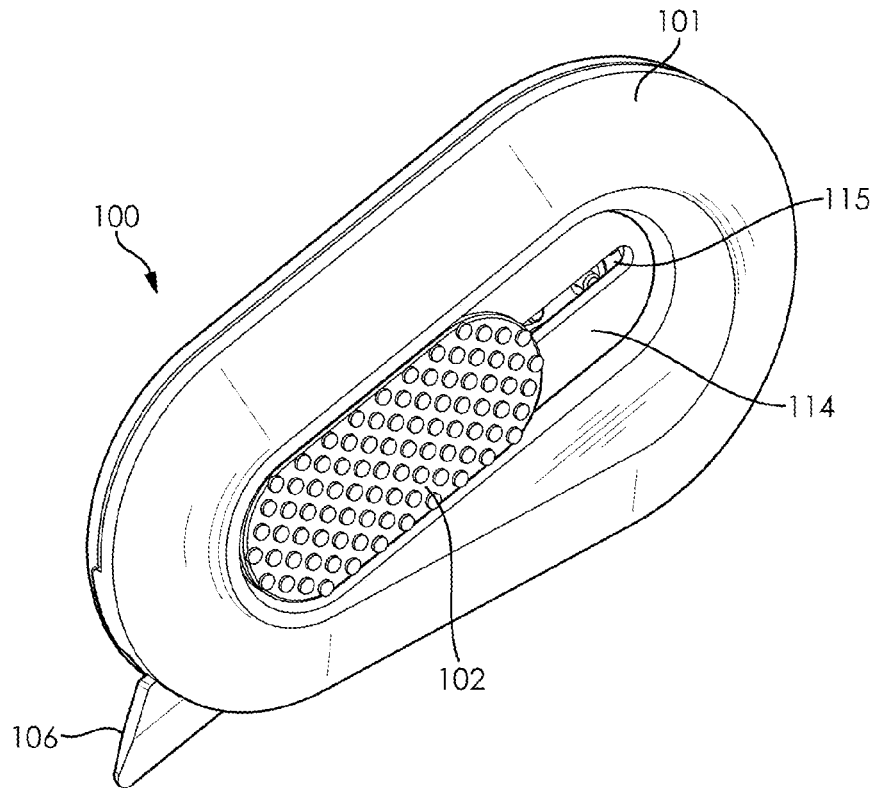


**U.S. Patent**

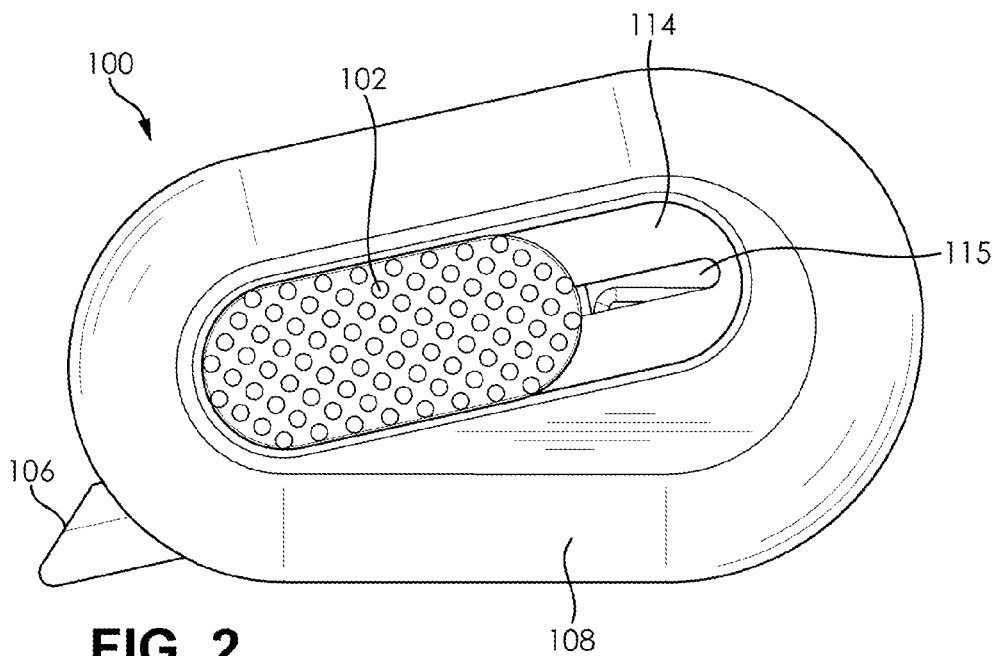
**Feb. 28, 2017**

**Sheet 1 of 8**

**US 9,579,808 B2**



**FIG. 1**



**FIG. 2**

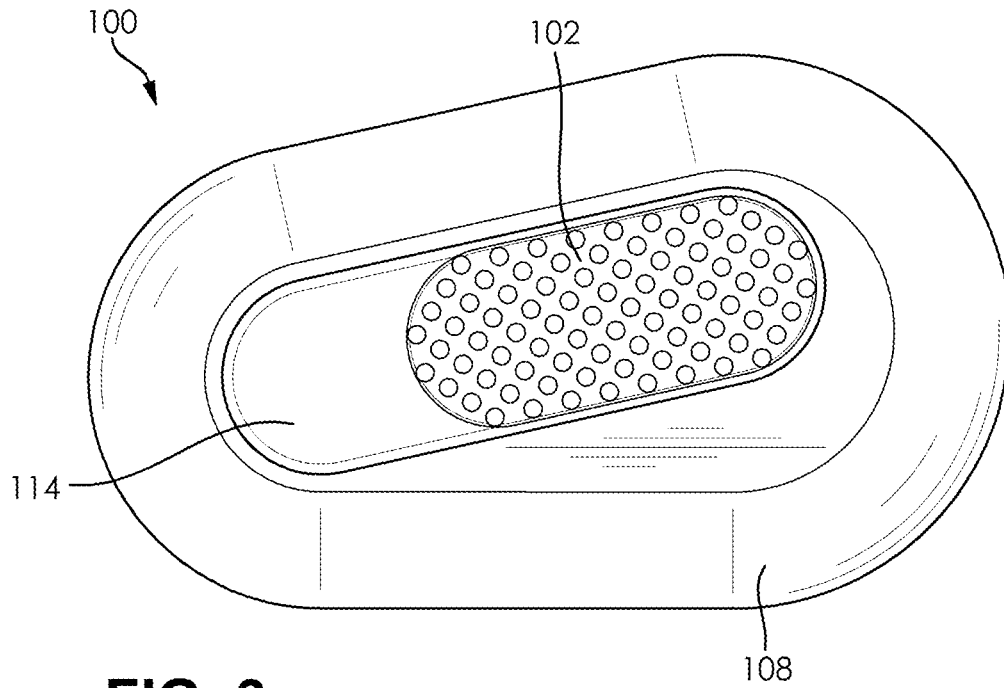


**U.S. Patent**

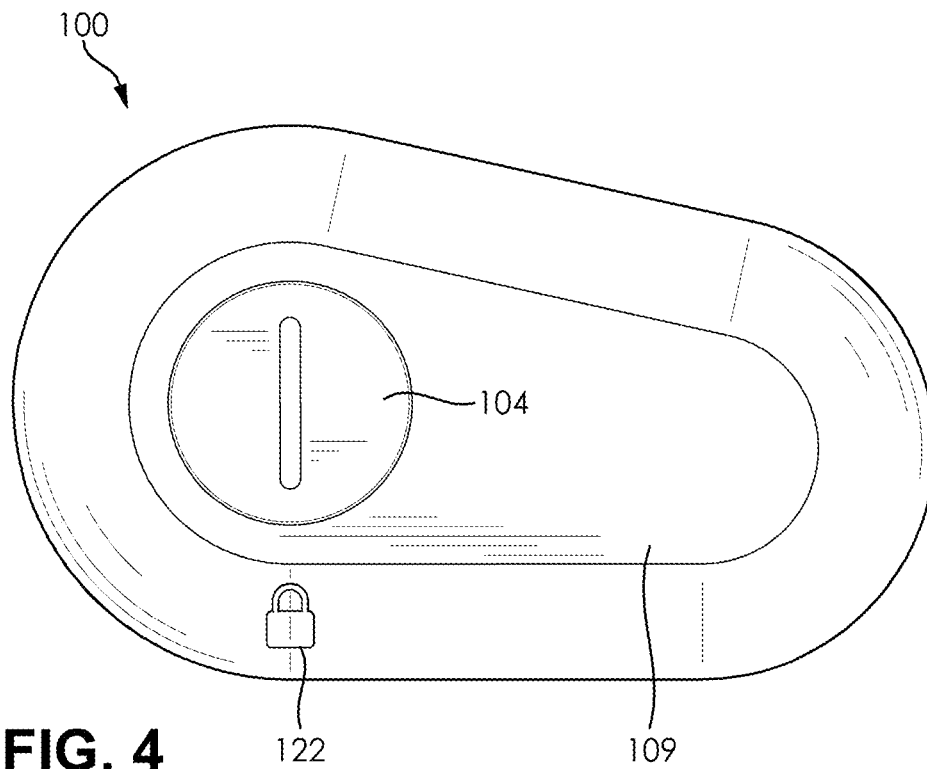
**Feb. 28, 2017**

**Sheet 2 of 8**

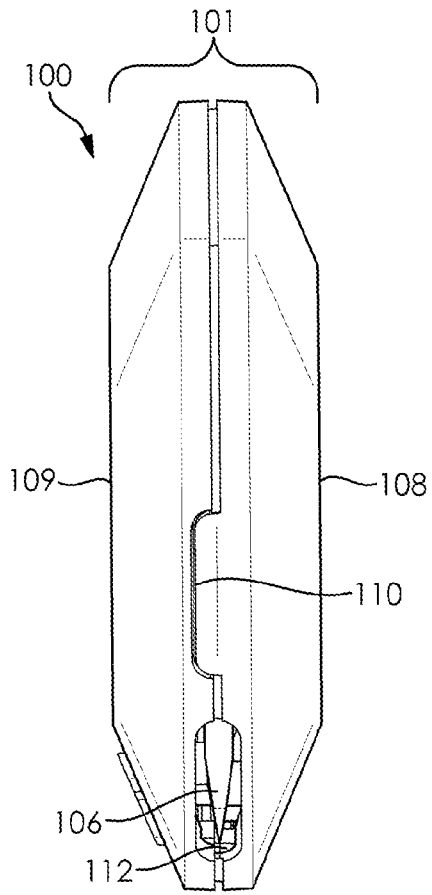
**US 9,579,808 B2**



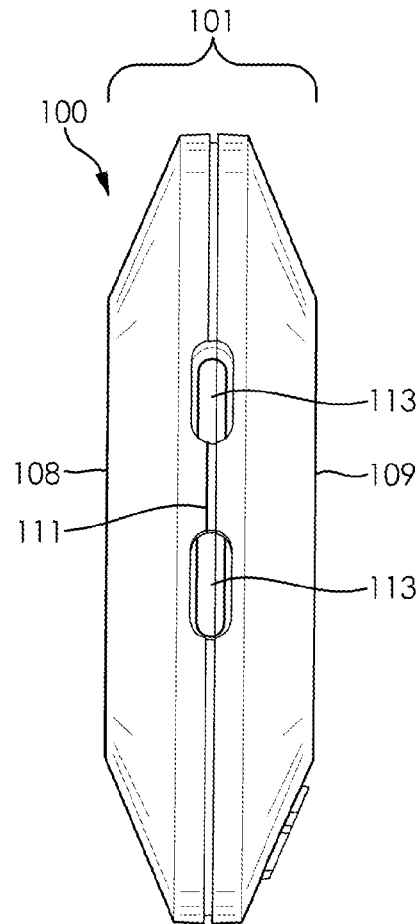
**FIG. 3**



**FIG. 4**



**FIG. 5**



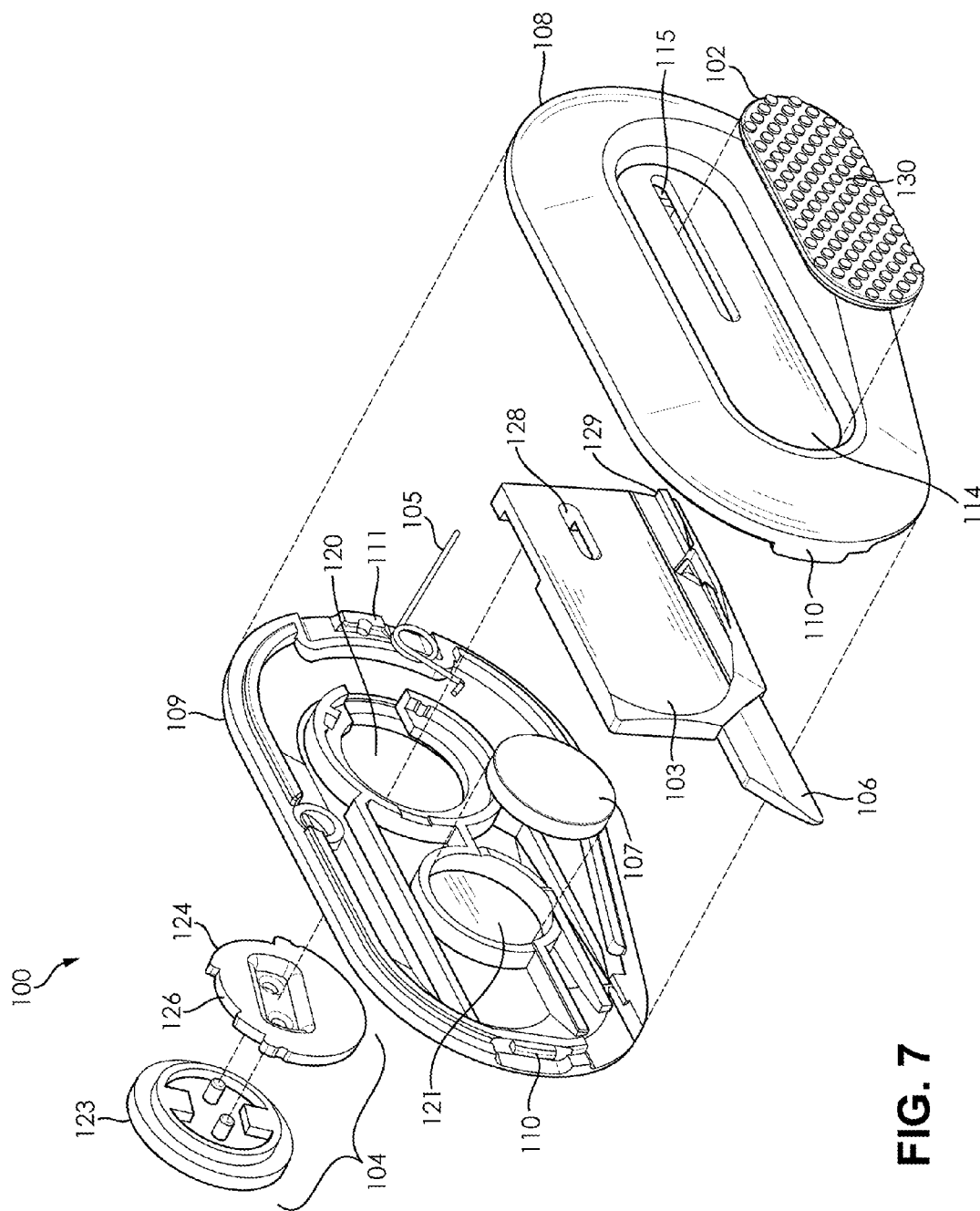
**FIG. 6**

## U.S. Patent

Feb. 28, 2017

Sheet 4 of 8

US 9,579,808 B2



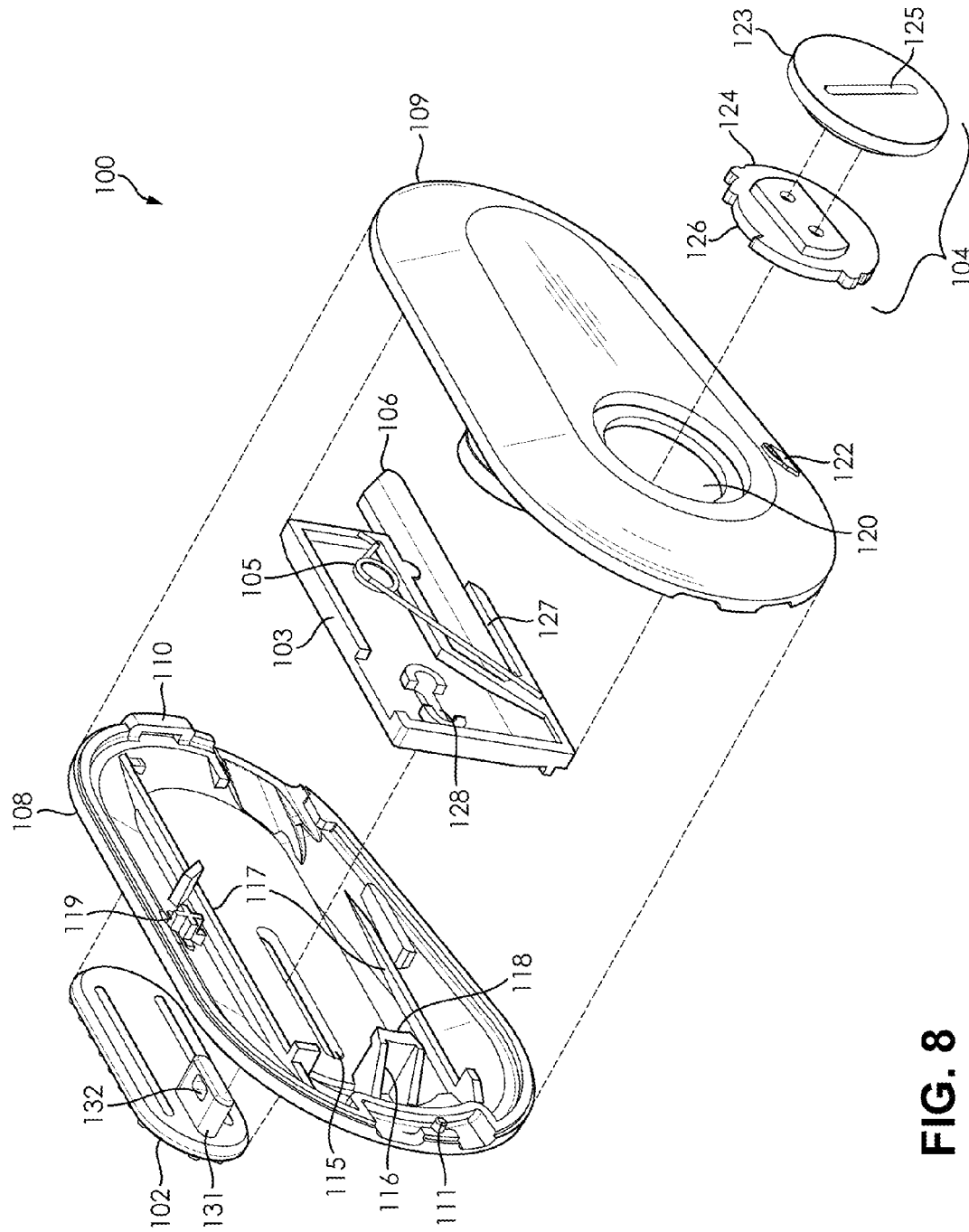


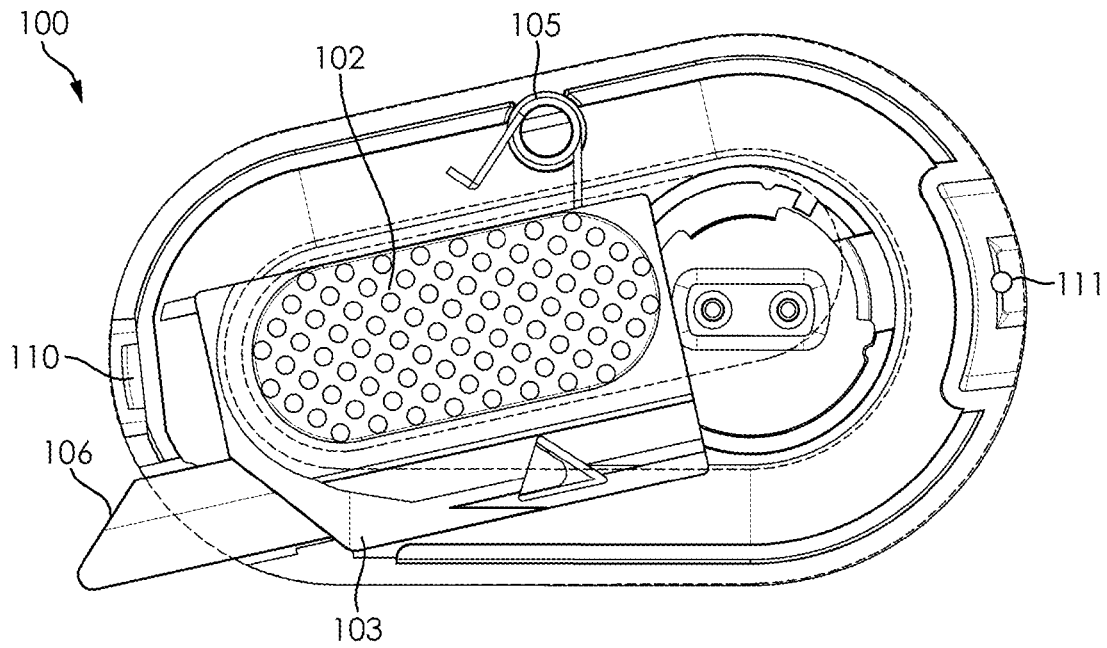
FIG. 8

**U.S. Patent**

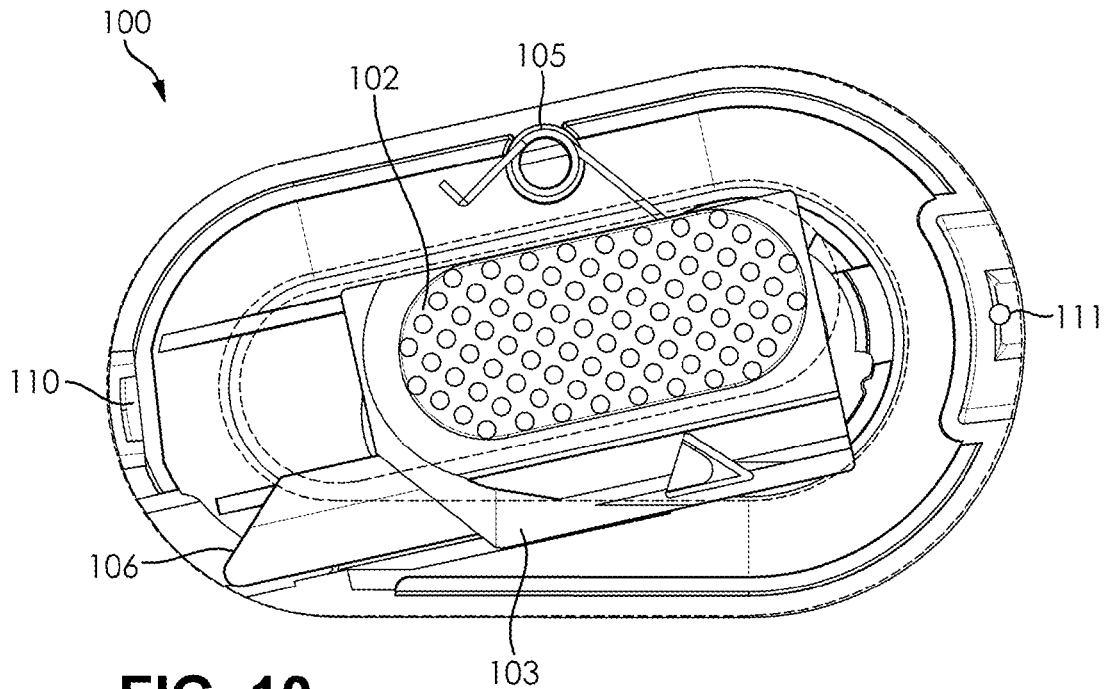
**Feb. 28, 2017**

**Sheet 6 of 8**

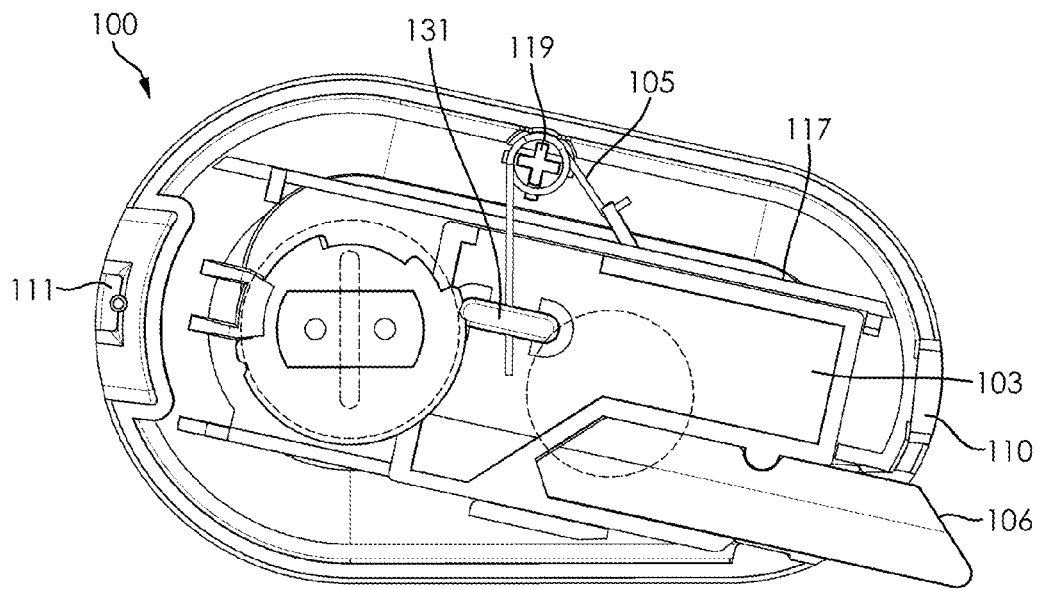
**US 9,579,808 B2**



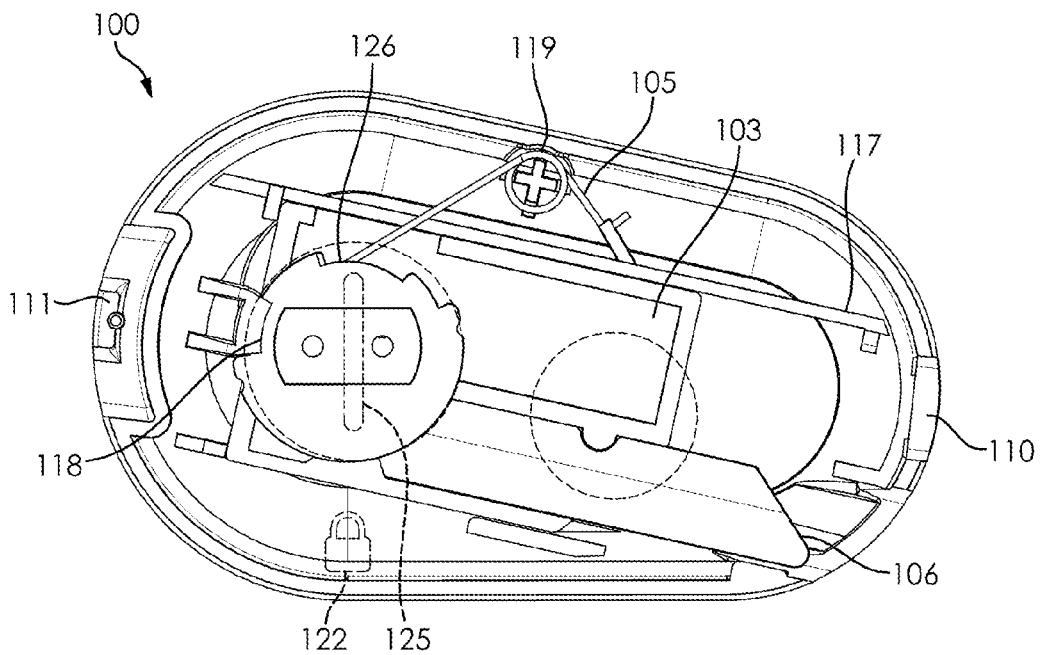
**FIG. 9**



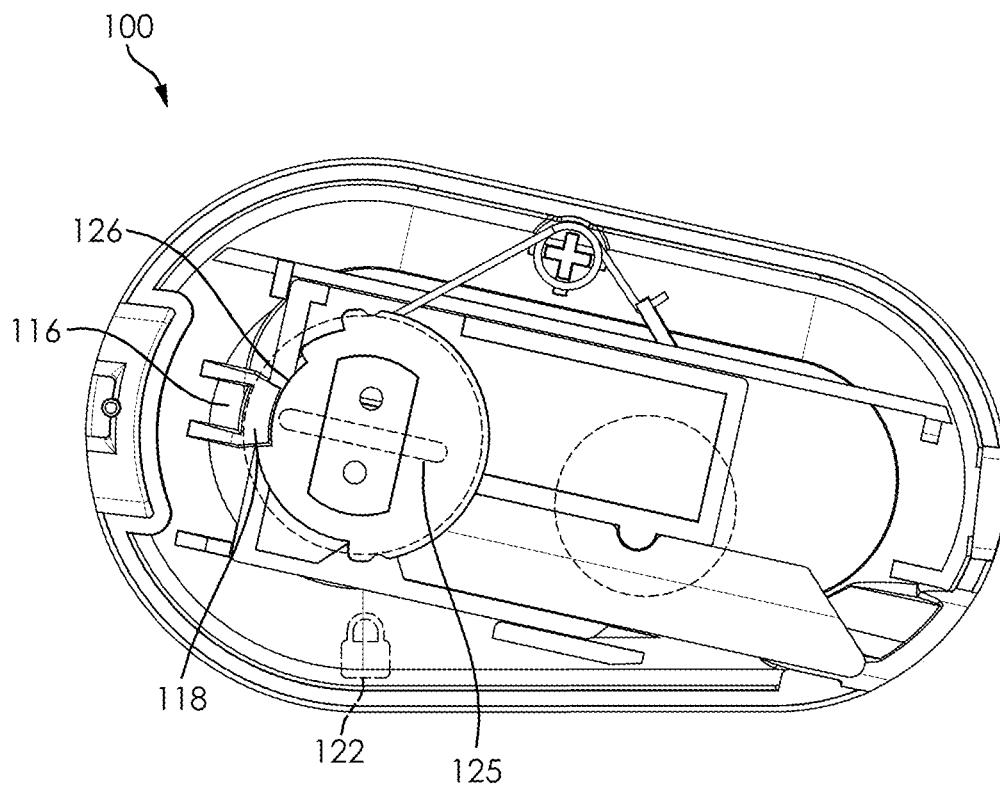
**FIG. 10**



**FIG. 11**



**FIG. 12**



**FIG. 13**

US 9,579,808 B2

# 1

## POCKET CUTTER

### CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of the following provisional application, each of which is hereby incorporated by reference in its entirety: U.S. Pat. App. No. 61/739,712 filed on Dec. 19, 2012 and entitled "Pocket Cutter."

### FIELD OF THE INVENTION

The present invention generally relates to a pocket cutter. Specifically, embodiments of the present invention relate to a pocket cutter apparatus with a retractable blade. Embodiments of the pocket cutter apparatus are further comprised of a thumb slider switch.

### BACKGROUND

The pocket cutter is a basic cutting tool that takes on a variety of forms. As the name suggests, a typical pocket cutter is small enough to be carried in the pocket of a user. Additionally, the typical pocket cutter is a compact cutting tool with a folding or otherwise retractable blade. The average pocket cutter requires the user to unfold the blade from the handle or extend the blade with a button or other mechanism in order to lock the blade into place before using the blade. This design feature creates an increase chance of injury, as the blade is left unnecessarily exposed for extended periods of time because many users find it cumbersome and time consuming to securely retract the blade when the pocket cutter is used repeatedly in a short time span.

Current pocket cutters also pose a safety concern in how a user holds the tool. The ergonomics of a standard pocket cutter require a user to wrap their hand completely around the handle of the pocket cutter. This design creates a hazard to the user as the handle can slip through the user's hand and expose the user to the blade of the pocket cutter as it passes through the user's hand. This shortcoming is exacerbated by the fact that the blade of the pocket cutter blade remains extended as it does not automatically retract.

Therefore, there is a need in the art for a pocket cutter that incorporates automatically retracting blade and improved handle ergonomics to reduce the risk of injury. These and other features and advantages of the present invention will be explained and will become obvious to one skilled in the art through the summary of the invention that follows.

### SUMMARY OF THE INVENTION

Accordingly, it is an aspect of the present invention to provide a pocket cutter with an automatically retracting blade. Furthermore, it is an aspect of the present invention to provide a compact cutting tool that is capable of making nimble, accurate cuts.

According to an embodiment of the present invention, a pocket cutter includes: a main body housing, including a front-half body shell configured with a switch groove slot, a rear-half body shell, and a blade outlet slot, wherein the blade outlet slot is formed at a front edge of the main body housing from a notch in each of the front-half body shell and the rear-half body shell, a blade carrier retained within the main body housing, wherein the blade carrier is configured to hold a cutting blade, a thumb slider switch configured to pass through the switch groove slot in the front-half body

2

shell and engage with the blade carrier to form a blade control unit that is movable between at least two positions, wherein a first position of the at least two positions is when the thumb slider switch and the blade carrier are in a rear position and the cutting blade is retracted within the main body housing, wherein a second position of the at least two positions is when the thumb slider switch and the blade carrier are in a forward position and the cutting blade is extended from the blade outlet slot, and a tension component configured to connect the blade control unit to an anchor point, wherein the tension component causes the cutting blade to be automatically retracted from the second position to the first position when the thumb slider is not held in the second position.

According to an embodiment of the present invention, the front-half body shell further includes a slider switch groove formed as a depression in an outer wall of the front-half body shell in which the thumb slider switch moves between the first position and the second position.

According to an embodiment of the present invention, the slider switch groove defines a movement limit boundary for the first position and the second position of the thumb slider switch.

According to an embodiment of the present invention, the switch groove slot is formed in the bottom center of the slider switch groove.

According to an embodiment of the present invention, the front-half body shell further includes a blade carrier track that is formed on the interior of the front-half body shell and is adapted to guide the blade carrier within the main body housing.

According to an embodiment of the present invention, the blade carrier further includes a carrier track alignment feature that adapted to guide the blade carrier on the blade carrier track.

According to an embodiment of the present invention, the main body housing further includes a lanyard attachment point.

According to an embodiment of the present invention, the main body housing further includes a front housing engagement means that is adapted to align and connect the front edge of the front-half body section and to the front edge of the rear-half body section.

According to an embodiment of the present invention, the main body housing further includes a rear housing engagement means that is adapted to align and connect the back edge of the front-half body section and to the back edge of the rear-half body section.

According to an embodiment of the present invention, the front-half body shell further includes a blade carrier stop formed on the interior of the front-half body shell that is adapted to stop the blade carrier when it reaches the first position.

According to an embodiment of the present invention, the rear-half body shell further includes a magnet receptacle adapted to retain a magnet.

According to an embodiment of the present invention, the pocket cutter further includes a body housing lock that is adapted to lock the front-half body shell onto the rear-half body shell.

According to an embodiment of the present invention, the rear-half body shell is adapted to retain the body housing lock at a body housing lock aperture formed in the rear-half body shell.

According to an embodiment of the present invention, the body housing lock includes a locking hub that is adapted to



US 9,579,808 B2

3

reversibly engage with a locking hub connection element on the interior surface of the front-half body shell.

According to an embodiment of the present invention, the body housing lock includes an outer cap configured with an outer cap slot that is adapted to facilitate the operation of the body housing lock.

According to an embodiment of the present invention, the tension component is a spring.

According to an embodiment of the present invention, the blade control unit and the main body housing are configured to lock the blade control unit in the second position so as to cause the cutting blade to remain extended when the thumb slider switch is released.

According to an embodiment of the present invention, the cutting blade is configured to be manually retracted when the blade control unit is manually moved from the second position to the first position.

According to an embodiment of the present invention, the at least two positions correspond to at least two cutting blade positions selected from a group of cutting blade positions comprising a fully retracted cutting blade, a partially extended cutting blade, and fully extended cutting blade.

The foregoing summary of the present invention with the preferred embodiments should not be construed to limit the scope of the invention. It should be understood and obvious to one skilled in the art that the embodiments of the invention thus described may be further modified without departing from the spirit and scope of the invention.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a pocket cutter with its blade extended in accordance with an embodiment of the present invention;

FIG. 2 is front side view of a pocket cutter with its blade extended in accordance with an embodiment of the present invention;

FIG. 3 is a front side view of a pocket cutter with its blade retracted in accordance with an embodiment of the present invention;

FIG. 4 is a rear side view of a pocket cutter with its blade refracted in accordance with an embodiment of the present invention;

FIG. 5 is a front view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 6 is a rear view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 7 is an exploded view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 8 is an alternate exploded view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 9 is front side view of a pocket cutter where the front-half of the body housing is transparent and its blade is extended in accordance with an embodiment of the present invention;

FIG. 10 is front side view of a pocket cutter where the front-half of the body housing is transparent and its blade is retracted in accordance with an embodiment of the present invention;

FIG. 11 is rear side view of a pocket cutter where the rear-half of the body housing is transparent and its blade is extended in accordance with an embodiment of the present invention;

FIG. 12 is rear side view of a pocket cutter where the rear-half of the body housing is transparent and its blade is retracted in accordance with an embodiment of the present invention; and

4

FIG. 13 is rear side view of a pocket cutter where the rear-half of the body housing is transparent and the body housing lock is unlocked in accordance with an embodiment of the present invention.

#### DETAILED SPECIFICATION

The present invention generally relates to a pocket cutter. Specifically, embodiments of the present invention relate to a pocket cutter apparatus with a retractable blade. Embodiments of the pocket cutter apparatus are further comprised of a thumb slider switch.

According to an embodiment of the present invention, the pocket cutter is comprised of a main body housing, a thumb slider switch, a blade carrier, a blade, a spring, a magnet, and a body housing lock. Certain embodiments of the present invention may include fewer components or additional components depending on the utilization and purpose for the pocket cutter.

According to an embodiment of the present invention, the main body housing of the pocket cutter is configured to receive and retain the thumb slider switch, the blade carrier, the blade, the spring, the magnet, and the body housing lock. In a preferred embodiment, the main body housing may be comprised of two corresponding halves, a front-half body shell and a rear-half body shell, that are configured to contain the other components of the pocket cutter. The preferred embodiment of the main body housing may be further comprised of a front housing engagement means and a rear housing engagement means that are configured to align and connect the front-half body shell with the rear-half body shell. Finally, the preferred embodiment of the main body housing may be comprised of a blade outlet slot (at the front edge of the pocket cutter) and a lanyard attachment point (at the rear edge of the pen cutter). In the preferred embodiment, the main body housing may be primarily flat and roughly oval in shape. One of ordinary skill in the art would appreciate that the main body housing could be designed in any number of configurations, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the main body housing of the pocket cutter is comprised of a front-half body shell. In a preferred embodiment, the front-half body shell is comprised of a slider switch groove, a switch groove slot, a blade carrier stop, and a blade carrier track. In the preferred embodiment, the slider switch groove is formed on the outer surface of the front-half body shell, while the switch groove slot is a void formed in the bottom center of the slider switch groove that creates a passage to the internal portion of the pocket cutter. Additionally, the blade carrier stop and the blade carrier track are formed on the inner surface of the front-half body shell. One of ordinary skill in the art would appreciate that there are numerous suitable configurations for the front-half body shell of the pocket cutter, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the exterior surface of the front-half body shell of the pocket cutter may be configured with a slider switch groove and a switch groove slot. In a preferred embodiment, the slider switch groove is a depression formed in the outer surface of the front-half body shell, while the switch groove slot is an opening in the outer surface of the front-half body shell that is substantially contained within the slider switch groove. In the preferred embodiment, the slider switch groove defines the movement limits of the thumb slider switch, while the

US 9,579,808 B2

5

slider button slot allows the thumb slider switch to pass through front-half body shell to engage with the blade carrier.

According to an embodiment of the present invention, the interior surface of the front-half body shell may be configured with a blade carrier stop and a blade carrier track. In a preferred embodiment, the blade carrier stop is a protrusion that extends perpendicularly from the inner surface of the front-half body shell, while the blade carrier track is a set of ribs and/or channels on the inner surface of the front-half shell. In the preferred embodiment, the blade carrier stop is adapted to limit the movement range of the blade carrier within the main body housing by defining the boundary of the retracted (or rear) position, while the blade carrier track defines and guides the movement of the blade carrier between a retracted position and an extended position. Finally, the preferred embodiment of the front-half body shell may include multiple blade carrier stops, with one or more blade carrier stops configured at the rear portion of the blade carrier track and a main blade carrier stop configured on the inner surface of the rear middle portion of front-half body shell. The preferred embodiment of the main blade carrier stop may further include a locking hub connection element that is formed at the distal end of the main blade carrier stop and is configured to engage with a corresponding component on the body housing lock.

According to an embodiment of the present invention, the pocket cutter may be configured with a tension component attachment point formed on inner surface of the main body housing. In a preferred embodiment, then tension component attachment point (or anchor point) is one or more protrusions formed on the inner surface of the front-half body shell that are adapted to connect to or otherwise receive the tension component. One of ordinary skill in the art would appreciate that there are many arrangements for a tension component attachment point, and embodiments of the present invention are contemplated for use with any such arrangement.

According to an embodiment of the present invention, the main body housing of the pocket cutter is comprised of a rear-half body shell. In a preferred embodiment, the rear-half body shell is comprised of a body housing lock aperture and a magnet receptacle. In the preferred embodiment, the body housing lock aperture is formed in the wall of the rear-half body shell to allow the body housing lock to pass through the main body housing and engage with the locking hub connection element on the blade carrier stop, while the magnet receptacle is formed on the inner surface of the rear-half body shell and is adapted to receive a magnet. Additionally, the outer surface of the rear-half body shell may further include a lock indicator that is adapted to show when the body housing lock is engaged. One of ordinary skill in the art would appreciate that there are numerous suitable configurations for the rear-half body shell of the pocket cutter, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the main body housing includes a front housing engagement means and a rear housing engagement means. In a preferred embodiment, the front housing engagement means is a pair of corresponding connector elements that configured on the front portion of each of the front-half body shell and the rear-half body shell, that are adapted to connect and align the front portion of main body housing. The front housing engagement means may be configured to connect the front-half body shell to the rear-half body shell in addition to or instead of the body housing lock. In a preferred embodi-

6

ment, the rear housing engagement means is, similarly, a pair of corresponding connector elements that configured on the rear portion of each of the front-half body shell and the rear-half body shell, that are adapted to connect and align the rear portion of main body housing. The rear housing engagement means may be configured to connect the front-half body shell to the rear-half body shell in addition to or instead of the body housing lock. In the preferred embodiment, the main body housing is separable into two halves to facilitate the replacement of the cutting blade. In an alternate embodiment, however, the main body housing is not separable, and the cutting blade is replaced by extending the cutting blade through the blade outlet slot. One of ordinary skill in the art would appreciate that the each of the housing engagement could be adapted with a number of designs, and embodiments of the present invention are contemplated for use with any suitable design.

According to an embodiment of the present invention, the main body housing is comprised of a blade outlet slot and a lanyard attachment point. In a preferred embodiment, the blade outlet slot is formed on the edge of the front portion of the main body housing. In particular, a notch in the edges of each of the front-half body shell and rear-half body shell collectively form the blade outlet slot when the two halves are connected together. Similarly, in a preferred embodiment, the lanyard attachment point is formed on the edge of the rear portion of the main body housing. In particular, one or more notches in the edges of each of the front-half body shell and rear-half body shell collectively form the lanyard attachment point when the two halves are connected together.

According to an embodiment of the present invention, the pocket cutter may include a body housing lock. In a preferred embodiment, the body housing lock is comprised of an external outer cap and an internal locking hub. In the preferred embodiment, the body housing lock is retained within the body housing lock aperture of the rear-half body shell and is configured to reversibly connect to the locking hub connection element on the blade carrier stop. Specifically, the outer cap is retained within the outer surface of the rear-half body shell and is connected to the locking hub, which is retained on at the inner surface of the rear-half body shell. In the preferred embodiment, when the body housing lock is engaged it causes the rear-half body shell to be securely connected to the front-half body shell and, furthermore, serves as an additional means of securing the blade in the blade carrier. The body housing lock may be engaged with a twist-lock connection, a snap connection, or a screw-type connection. In alternate embodiments, the body housing lock may be comprised of additional or fewer components. One of ordinary skill in the art would appreciate that there are many suitable designs for a body housing lock, and embodiments of the present invention are contemplated for use with any such design.

According to an embodiment of the present invention, the body housing lock is comprised of an outer cap. In a preferred embodiment, the outer cap is substantially disk-shaped component that is adapted to be retained with the wall of the rear-half body shell, such that the outer cap is flush with the outer surface of the rear-half body shell. The outer cap may be further adapted with a slot to assist the user with engaging and disengaging the body housing lock. In the preferred embodiment a user will twist the outer cap, which in turn causes the locking hub to selective engage with the front-half body shell (i.e. via the locking hub connection element on the blade carrier stop).

US 9,579,808 B2

7

According to an embodiment of the present invention, the body housing lock is comprised on a locking hub. In a preferred embodiment, the locking hub is a primarily dish-shaped component that is adapted to connect to the outer cap and reversibly engage with the locking hub connection element on the blade carrier stop. In the preferred embodiment, the locking hub may be configured with a series of notches and/or projections that correspond to similar features on the body housing lock aperture to define the movement limits of the body housing lock. More importantly, those notches and/or projections allow the locking hub to receive the locking hub connection element and then for the locking hub to be twisted so that the lip of the locking hub connection element is held firmly under the lip of the locking hub.

According to an embodiment of the present invention, the pocket cutter may include a blade carrier. In a preferred embodiment, the blade carrier may be comprised of a blade holder, a slider switch engagement point, and a carrier track alignment feature. In the preferred embodiment, the blade holder is configured to retain a cutting blade, while the slider switch engagement point is configured to connect to the thumb slider switch. In the preferred embodiment, the carrier track alignment feature may be adapted to engage with the blade carrier track of the main body housing in a way that allows the blade carrier to be aligned to slide forward and backward within the main body housing. One of ordinary skill in the art would appreciate that the blade carrier could be designed with a number of configurations, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the pocket cutter may include a thumb slider switch. In a preferred embodiment, the thumb slider switch is comprised of an actuator portion and a blade carrier connector post. In a preferred embodiment, the top actuator portion may be generally flat and oval in shape with a textured surface on its front face that is adapted to improve grip between the thumb slider switch and the thumb of a user. Additionally, in the preferred embodiment, the blade carrier connector post extends perpendicularly off the rear of the thumb slider switch and is configured to pass through the switch groove slot and engage with the slider switch engagement point on the blade carrier. The thumb slider switch is further secured to the blade carrier when a portion of the spring engages with an attachment point on the blade carrier connector post (i.e. connector post securing point). In the preferred embodiment, when the thumb slider switch is connected to the blade carrier, the pair collectively forms the blade control unit. One of ordinary skill in the art would appreciate that there are many suitable designs for a thumb slider switch, and embodiments of the present invention are contemplated for use with any such design.

According to an embodiment of the present invention, the blade control unit may be used to extend and retract the cutting blade of the pocket cutter. In particular, when the thumb slider switch connects with the blade carrier to form the blade control unit, the thumb slider switch may then be used to slide the blade carrier forward and backward within the main body housing, consequently causing the blade to extend and retract, respectively. In a preferred embodiment, a user will push the thumb slider switch forward, thereby causing the blade carrier within the main body housing of the pocket cutter to be moved forward. With the blade carrier in the forward position, the blade will then be in an extended position through the blade outlet slot of the pocket cutter. When the thumb slider switch is released or otherwise

8

returned to the rear or retracted position, the blade carrier will likewise be returned to the retracted position causing the blade to be returned to the inside of the main body section of the pocket cutter.

According to an embodiment of the present invention, the pocket cutter may include a tension component. In a preferred embodiment, the tension component is a spring and is adapted to facilitate the retraction and extension of the cutting blade. In the preferred embodiment, the tension component attaches to tension component attachment point on the main body housing and the connector post securing point on the blade carrier connector post. In alternate embodiments, the tension component may be an elastic component or other resilient connector. One of ordinary skill in art would appreciate that there are numerous types and configurations for a tension component, and embodiments of the present invention are contemplated for use with any such tension component.

According to an embodiment of the present invention, the pocket cutter has an auto-retracting blade. In a preferred embodiment, the blade of the pen cutter can be extended by sliding a thumb slider switch forward. Applying forward pressure to the thumb slider switch causes creates compression or tension (distortion from the neutral state) in a spring or other tension component that is connectively linked to the blade of the pen cutter via the blade carrier. When the thumb slider switch is released, the compression (or tension) in the spring (or other tension component) causes the blade of the pocket cutter to be retracted as the spring returns to its unbiased or neutral state. One of ordinary skill in the art would appreciate that there are many methods to creating an automatically retracting blade, and embodiments of the present invention are contemplated for use with any such method.

According to an embodiment of the present invention, the pocket cutter has a manually retracting blade. In a preferred embodiment, the blade of the pocket cutter can be extended by pushing a thumb slider switch forward, as the thumb slider switch is connectively linked to the blade via the blade carrier. In one embodiment, the blade can be incrementally extended to cut through materials of varying thicknesses. Accordingly, the thumb slider switch may function in a ratchet-like fashion to lock at multiple positions that correspond to the varying extension of the blade. To extend or retract the blade, the thumb slider switch would be depressed and moved to the appropriate position. Once the blade is extended or retracted to the appropriate position, the thumb slider switch could then be released and the blade would be locked into that position. In an alternate embodiment, the thumb slider switch may be lockable in a forward position so as to cause the blade to remain extended despite pressure from a tension component. In said embodiment, when the thumb slider switch is released from the locked position, the blade will be automatically retracted within the main body section of the pocket butter. The blade may be locked in the forward position by any suitable locking means including, but not limited to, a friction fit, a latching mechanism, or a ratcheting mechanism.

According to an embodiment of the present invention, the pocket cutter may include a magnet. In a preferred embodiment, the magnet is secured to the magnet receptacle that is formed on the inner surface of the rear-half body shell. The magnet may be useful for any variety of tasks, including, but not limited to, holding or securing replacement blades, securing or storing the pocket cutter on magnetic surface, or picking up small magnetic objects, such as nails, screws, or other intricate objects.



US 9,579,808 B2

9

According to an embodiment of the present invention, the pocket cutter may include a blade. In a preferred embodiment, the blade may be removably engaged with the blade carrier. The blade may be made from any suitable material, including, but not limited to, metal, ceramic, or any combination thereof. One of ordinary skill in the art would appreciate that there are numerous configurations and materials that might be used for the blade, and embodiments of the present invention are contemplated for use with any such material or configuration.

According to an embodiment of the present invention, the blade that is used may be constructed from a ceramic material that is capable of withstanding extended use without becoming dull or unusable. Ceramic materials appropriate for such construction include, but are not limited to, Zirconium Oxide. One of ordinary skill in the art would appreciate that there are numerous ceramic materials that could be utilized with embodiments of the present invention.

According to an embodiment of the present invention, the blades used in the pocket cutter may contain rounded tips to reduce the chance of injury.

Turning now to FIG. 1, a perspective view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing **101**, a thumb slider switch **102**, a blade carrier (not shown), a body housing lock (not shown), a spring (not shown), a blade **106**, and a magnet (not shown). In this view, the thumb slider switch **102** can be seen resting in the slider switch groove **114**.

Turning now to FIG. 2, a front side view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing, a thumb slider switch **102**, a blade carrier (not shown), a body housing lock (not shown), a spring (not shown), a blade **106**, and a magnet (not shown). In this view, the thumb slider switch **102** can be seen in a forward position in the slider switch groove **114** that is located on the front-half body shell **108**. When the thumb slider switch **102** is in the forward position, the blade **106** is extended.

Turning now to FIG. 3, a front side view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing, a thumb slider switch **102**, a blade carrier (not shown), a body housing lock (not shown), a spring (not shown), a blade (not shown), and a magnet (not shown). In this view, the thumb slider switch **102** can be seen in a rear position in the slider switch groove **114** that is located on the front-half body shell **108**. When the thumb slider switch **102** is in the rear position, the blade (not shown) is extended.

Turning now to FIG. 4, a rear side view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing, a thumb slider switch (not shown), a blade carrier (not shown), a body housing lock **104**, a spring (not shown), a blade (not shown), and a magnet (not shown). In this view, the body housing lock **104**, which is located on the rear-half body shell **109**, can be seen in the locked position, with the slot of the locking cap **104** pointing at the lock indicator **122**.

Turning now to FIG. 5, a front view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing **101**. In the preferred embodiment, the main body housing **101** is comprised of a front-half body shell **108** and a rear-half body shell **109**. The front portions

10

of the front-half body shell **108** and a rear-half body shell **109** are connected through the front housing engagement means **110**. The front of the main body housing **101** is also configured with a blade outlet slot **112** through which the cutting blade **106** extends.

Turning now to FIG. 6, a rear view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing **101**. In the preferred embodiment, the main body housing **101** is comprised of a front-half body shell **108** and a rear-half body shell **109**. The rear portions of the front-half body shell **108** and a rear-half body shell **109** are connected through the rear housing engagement means **111**. The front of the main body housing **101** is also configured with lanyard attachment point **113**.

Turning now to FIG. 7, a front exploded view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the main components that comprise the pocket cutter **100** are a main body housing, a thumb slider switch **102**, a blade carrier **103**, a body housing lock **104**, a spring **105**, a blade **106**, and a magnet **107**. The main body housing is comprised of a the main body housing **101**, which substantially contains the other components, is comprised of a front-half body shell **108** and a rear-half body shell **109** which are joined to each other through a combination of the body housing lock **104**, the front housing engagement means **110**, and the rear housing engagement means **111**. The body housing lock **104**, is comprised of an outer cap **123** and a locking hub **124**. The rear-half body shell **109** is adapted to retain the body housing lock **104** at the body housing lock aperture **120** and the magnet **107** at the magnet receptacle **121**. The front-half body shell **108** is configured with a slider switch groove **114** where the thumb slider switch **102** rests and a switch groove slot **115** through which the thumb slider switch **102** passes to engage with the slider switch engagement point **128** on the blade carrier **103**. The thumb slider switch **102** is further configured with a textured actuator portion **130** that provides a user to main a firm grip on the thumb slider switch **102**. The blade carrier **103** is further configured with a carrier track alignment feature **129** that is configured to guide the blade carrier **103** on the blade carrier track (not shown).

Turning now to FIG. 8, a rear exploded view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the main components that comprise the pocket cutter **100** are a main body housing, a thumb slider switch **102**, a blade carrier **103**, a body housing lock **104**, a spring **105**, a blade **106**, and a magnet **107**. The main body housing is comprised of a the main body housing **101**, which substantially contains the other components, is comprised of a front-half body shell **108** and a rear-half body shell **109** which are joined to each other through a combination of the body housing lock **104**, the front housing engagement means **110**, and the rear housing engagement means **111**. The body housing lock **104**, is comprised of an outer cap **123** and a locking hub **124**. The front-half body shell **108** is configured with a switch groove slot **115** through which the blade carrier connector post **131** of the thumb slider switch **102** passes to engage with the slider switch engagement point **128** on the blade carrier **103**. Once passing through the slider switch engagement point **128**, the thumb slider switch **102** is secured in place when the long arm of the spring **105** passes through the connector post attachment point **132** on the blade carrier connector post **131** (See also FIG. 11). The front-half body shell **108** is further adapted with a blade carrier stop **116**, a blade carrier track **117**, a locking hub connection element **118**, and

US 9,579,808 B2

11

a tension component attachment point **119**. In the preferred embodiment, the locking hub connection element **118** is configured at the distal end of the blade carrier stop **116**. The locking hub connection element **118** is configured to interact with the locking hub **124** of the body housing lock **104**. The blade carrier track **117** is adapted to cooperate with the carrier track alignment feature (not shown) to properly guide the blade carrier **103**. The blade carrier **103** is further configured with a blade holder **127** adapted to secure the cutting blade **106**. The rear-half body shell **109** is adapted to retain the body housing lock **104** at the body housing lock aperture **120** and is further configured with a lock indicator **122** to indicate when the status of the body housing lock **104** (i.e. locked or unlocked).

Turning now to FIG. **9**, a front side view of a pocket cutter with a transparent front-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button **102** is moved to the forward position, the blade carrier **103** is moved forward (and therefore the blade **106** is extended) and the spring **105** is compressed. As long a user maintains forward pressure on the slider button **102**, the blade **106** will remain extended against the tension of the spring **105**. When the slider button **102** is released, the tension in the spring **105** causes the blade carrier **103** and the cutting blade **106** to be automatically retracted.

Turning now to FIG. **10**, a front side view of a pocket cutter with a transparent front-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button **102** is in the rear position, the blade carrier **103** is also in the rear position (and therefore the blade **106** is retracted) and the spring **105** is relaxed.

Turning now to FIG. **11**, a rear side view of a pocket cutter with a transparent rear-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button (not shown) is in the rear position, the blade carrier **103** is also in the rear position (and therefore the blade **106** is retracted) and the spring **105** is relaxed. Additionally, in this view (along with FIG. **12**), in can be clearly seen how the blade carrier track **117** guides the blade carrier **103**. Finally, this view also shows how, in the preferred embodiment, the spring **105** is attached to the tension component attachment point **119** on the front-half body shell and then to the connector post securing point (not shown) on the blade carrier connector post **131** of the thumb slider switch.

Turning now to FIG. **12**, a rear side view of a pocket cutter with a transparent rear-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button **102** is moved to the forward position, the blade carrier **103** is moved forward (and therefore the blade **106** is extended) and the spring **105** is compressed. As long a user maintains forward pressure on the slider button **102**, the blade **106** will remain extended against the tension of the spring **105**. When the slider button **102** is released, the tension in the spring **105** causes the blade carrier **103** and the cutting blade **106** to be automatically retracted. Additionally, in this view (along with FIG. **11**), in can be clearly seen how the blade carrier track **117** guides the blade carrier **103**. Finally, this view also demonstrates how the body housing

12

lock functions. In a preferred embodiment, the front-half body shell is locked together with the rear-half body shell when the locking hub engagement element **118** is held behind the locking hub. The status of the body housing lock being firmly secured is confirmed by the fact that the outer cap slot **125** is aligned with the lock indicator **122**.

Turning now to FIG. **13**, a rear side view of a pocket cutter with a transparent rear-half body shell, in accordance with an embodiment of the present invention. In a preferred, the pocket cutter **100** is configured with a body housing lock that secures the front-half body shell together with the rear-half body shell. In a preferred embodiment, the front-half body shell is unlocked from the rear-half body shell when the locking hub engagement element **118** is released (or no longer blocked by) the locking hub. In a preferred embodiment, the body housing lock is rotated so that the locking hub is in a position where the locking hub notch **126** is centered on the locking hub engagement element **118**. This positioning of the locking hub notch **126** allows the locking hub engagement element **118** move freely past the locking hub of the body housing lock, therefore allowing the front-half body shell and the rear-half body shell to be separated. The status of the body housing lock being unlocked is confirmed by the fact that the outer cap slot **125** is no longer aligned with the lock indicator **122**.

It should be noted that the features illustrated in the drawings are not necessarily drawn to scale, and features of one embodiment may be employed with other embodiments as the skilled artisan would recognize, even if not explicitly stated herein. Descriptions of well-known components and processing techniques may be omitted so as to not unnecessarily obscure the embodiments.

While multiple embodiments are disclosed, still other embodiments of the present invention will become apparent to those skilled in the art from this detailed description. The invention is capable of myriad modifications in various obvious aspects, all without departing from the spirit and scope of the present invention. Accordingly, the drawings and descriptions are to be regarded as illustrative in nature and not restrictive.

The invention claimed is:

1. A pocket cutter, comprising:

a housing;

a blade carrier disposed within said housing, said blade carrier having an exterior side and an interior side and being configured to retain a retractable blade on its interior side,

a thumb slider switch operably connected to said blade carrier and configured to move said blade carrier transversely along a transverse groove in said housing,

said thumb slider switch comprising a connector post that connects said thumb slider switch to said blade carrier and is configured to travel along said transverse groove, said connector post having an aperture defined therein, said connector post extending through said transverse groove and through a corresponding slot in said blade carrier such that said connector post aperture extends beyond said blade carrier slot to the interior side of said blade carrier;

a spring mounted to a wall of said housing wherein said spring comprises a short arm and a long arm, wherein said long arm extends through the connector post aperture on the interior side of said blade carrier, thereby securing said thumb slider switch to said blade carrier and imparting a biasing force to said blade carrier that provides resistance against moving the

## US 9,579,808 B2

## 13

blade carrier forward to deploy a blade and biases the blade carrier to a retracted position within the housing.

2. The pocket cutter of claim 1, wherein said housing is further comprised of a slider switch groove formed as a depression in an outer wall of said housing.

3. The pen cutter of claim 2, wherein said slider switch groove defines a movement limit boundary for said thumb slider switch.

4. The pocket cutter of claim 2, wherein said switch groove slot is formed in the bottom center of said slider switch groove.

5. The pocket cutter of claim 1, wherein said housing is further comprised of a blade carrier track that is formed on the interior of said housing and is adapted to guide said blade carrier within said housing.

6. The pocket cutter of claim 5, wherein said blade carrier is further comprised of a carrier track alignment feature that is adapted to guide said blade carrier on said blade carrier track.

7. The pocket cutter of claim 1, wherein said housing is further comprised of a lanyard attachment point.

8. The pocket cutter of claim 1, wherein said blade carrier is formed with a depression that is configured to retain said cutting blade.

9. The pocket cutter of claim 1, further comprising a body housing lock.

## 14

10. The pocket cutter of claim 9, wherein said housing comprises a front-half body shell and a rear-half body shell joined together to form said housing, wherein said front-half body shell and rear-half body shell may be separated when said body housing lock is in an unlocked position.

11. The pocket cutter of claim 1, further comprising:

a blade carrier stop that extends from an inner surface of said housing and is adapted to limit the movement range of the blade carrier within the housing, said blade carrier stop comprising a lip portion; and

a body housing lock comprising an outer cap and a locking hub coaxially connected thereto, said outer cap defining a single linear slot configured to receive a flat member used to rotate the body housing lock into an unlocked position in which the housing can be opened and a locked position in which the housing cannot be opened, wherein said locked position is achieved by rotating the locking hub until said lip portion of said blade carrier stop is held behind a peripheral edge of the locking hub and said unlock position is achieved by rotating the locking hub until a notch in said locking hub overlaps said lip portion.

12. The pocket cutter of claim 11, wherein said locked position is indicated when an end of said linear slot points to a lock indicator on the outer surface of said housing.

\* \* \* \* \*

# EXHIBIT B



US00D636646S

(12) **United States Design Patent**  
**Muccino et al.**

(10) **Patent No.:** **US D636,646 S**

(45) **Date of Patent:** **\*\* Apr. 26, 2011**

(54) **UTILITY BLADE**

(75) Inventors: **Alfredo Muccino**, San Jose, CA (US);  
**Scot Herbst**, San Jose, CA (US); **Alan Regala**, Seattle, WA (US)

(73) Assignee: **Slice, Inc.**, Campbell, CA (US)

(\*\*) Term: **14 Years**

(21) Appl. No.: **29/377,308**

(22) Filed: **Oct. 20, 2010**

(51) **LOC (9) Cl.** ..... **08-03**

(52) **U.S. Cl.** ..... **D8/20**

(58) **Field of Classification Search** ..... D8/16,  
D8/18-20, 64, 95-104; D22/117, 118; D24/146;  
7/118, 148; 30/142, 144, 165, 166.3, 272.1,  
30/314, 320, 346, 346.5, 346.55, 346.56,  
30/349, 351, 355-357

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D344,155 S \* 2/1994 Ueno et al. .... D8/98  
D379,256 S \* 5/1997 Tipp ..... D8/16

D404,621 S \* 1/1999 Liese ..... D8/16  
D602,752 S \* 10/2009 Luciano et al. .... D8/20

\* cited by examiner

*Primary Examiner* — Garth Rademaker

(74) *Attorney, Agent, or Firm* — The Sigma Law Group;  
Attorney James M. Smedley LLC; James Michael Smedley,  
Esq.

(57) **CLAIM**

We claim the ornamental design for a utility blade, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a utility blade showing the new design;

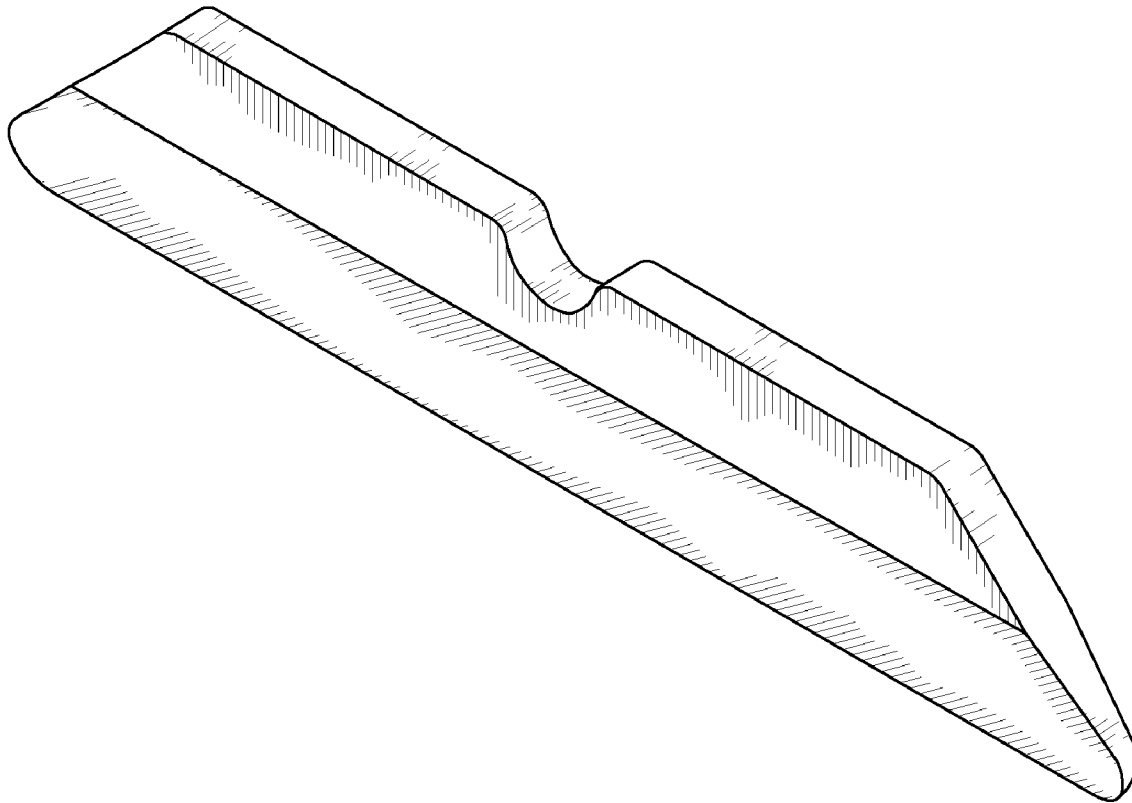
FIG. 2 is a bottom view showing the new design.

FIG. 3 is a side view showing the new design.

FIG. 4 is a top view showing the new design; and,

FIG. 5 is a front view showing the new design.

**1 Claim, 2 Drawing Sheets**



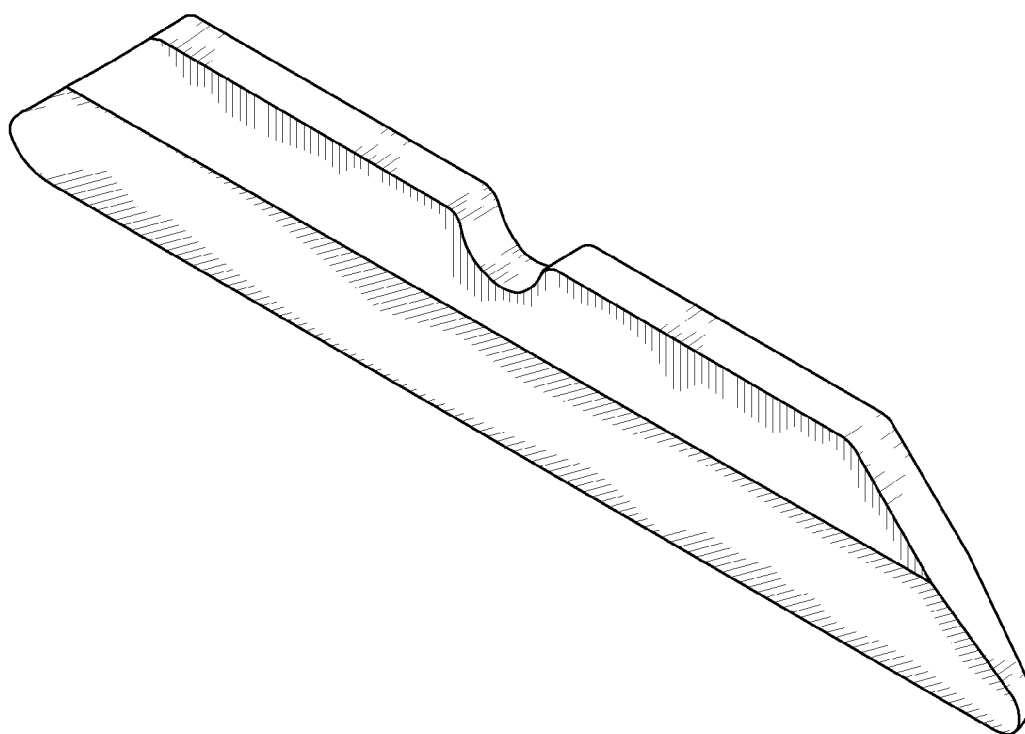


**U.S. Patent**

**Apr. 26, 2011**

**Sheet 1 of 2**

**US D636,646 S**



***FIG. 1***

**U.S. Patent**

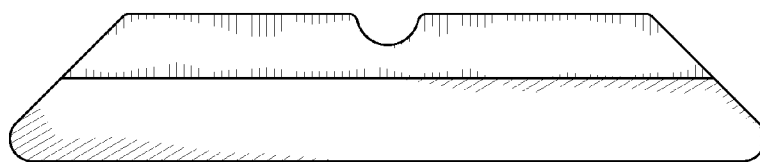
**Apr. 26, 2011**

**Sheet 2 of 2**

**US D636,646 S**



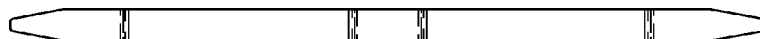
*FIG. 2*



*FIG. 3*



*FIG. 5*



*FIG. 4*

# EXHIBIT C



US009925674B2

(12) **United States Patent**  
**Scimone et al.**

(10) **Patent No.:** **US 9,925,674 B2**

(45) **Date of Patent:** **\*Mar. 27, 2018**

(54) **POCKET CUTTER**

USPC ..... 30/2, 335, 164, 162

See application file for complete search history.

(71) Applicant: **Slice, Inc.**, San Jose, CA (US)

(72) Inventors: **Thomas Scimone**, Campbell, CA (US);  
**Scott Herbst**, San Jose, CA (US);  
**Bruce Allen Eisenhauer**, Du Quoin, IL (US)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,644,230	A *	7/1953	Anderson	.....	B26B 5/006
					30/151
4,281,458	A *	8/1981	Okada	.....	B26B 1/08
					30/162
6,219,923	B1 *	4/2001	Sinisi	.....	B26B 5/001
					30/162
6,516,520	B1 *	2/2003	Liao	.....	B43M 7/002
					30/162
6,543,140	B1 *	4/2003	Davis	.....	B26B 29/02
					30/162
7,155,829	B1 *	1/2007	Sun	.....	B26B 5/003
					30/125
8,375,588	B2 *	2/2013	Gringer	.....	B26B 5/001
					30/154
8,938,883	B2 *	1/2015	Gringer	.....	B26B 1/048
					30/155

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **15/435,757**

(22) Filed: **Feb. 17, 2017**

(65) **Prior Publication Data**

US 2017/0157784 A1 Jun. 8, 2017

**Related U.S. Application Data**

(63) Continuation of application No. 14/106,678, filed on Dec. 13, 2013, now Pat. No. 9,579,808.

(60) Provisional application No. 61/739,712, filed on Dec. 19, 2012.

(51) **Int. Cl.**  
**B26B 5/00** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **B26B 5/003** (2013.01)

(58) **Field of Classification Search**  
CPC ..... B26B 5/003; B26B 1/00; B26B 1/08

\* cited by examiner

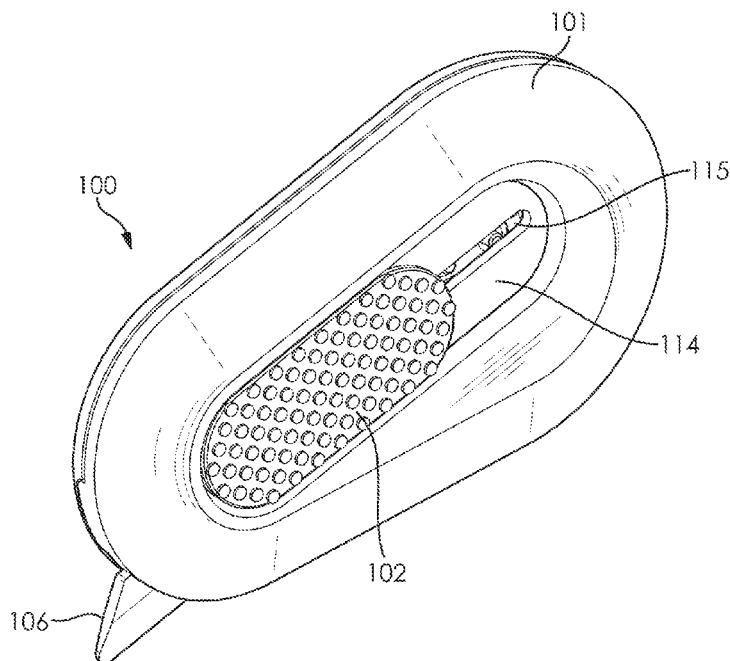
*Primary Examiner* — Omar Flores Sanchez

(74) *Attorney, Agent, or Firm* — James M. Smedley LLC; James Michael Smedley, Esq.

(57) **ABSTRACT**

The present invention generally relates to a pocket cutter. Specifically, embodiments of the present invention relate to a pocket cutter apparatus with a retractable blade. Embodiments of the pocket cutter apparatus are further comprised of a thumb slider switch.

**9 Claims, 8 Drawing Sheets**

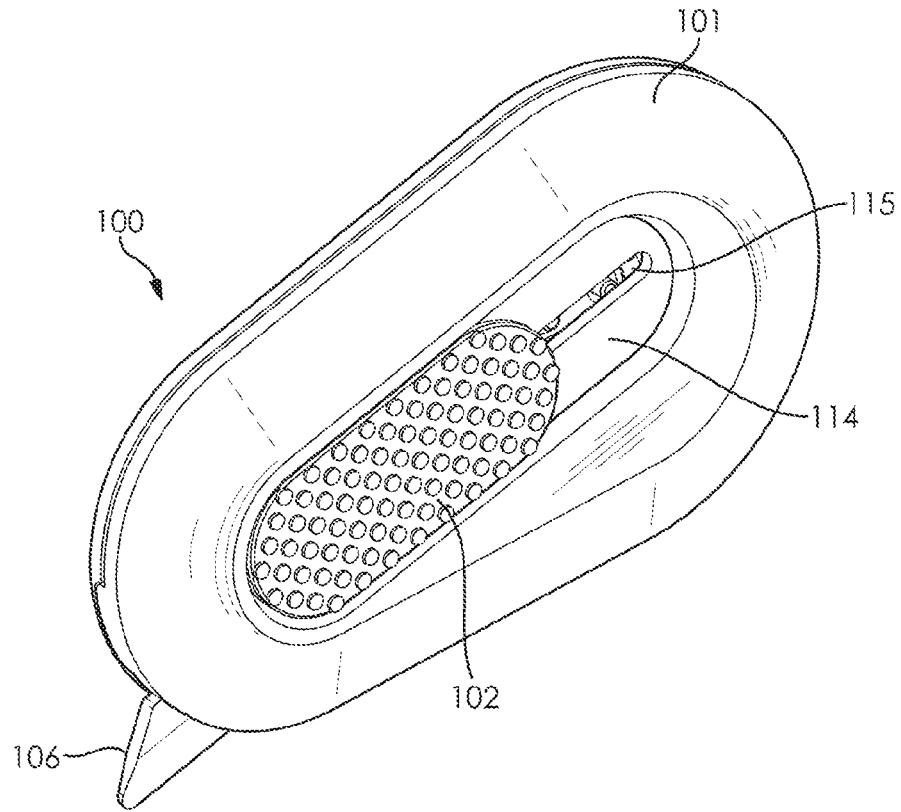


**U.S. Patent**

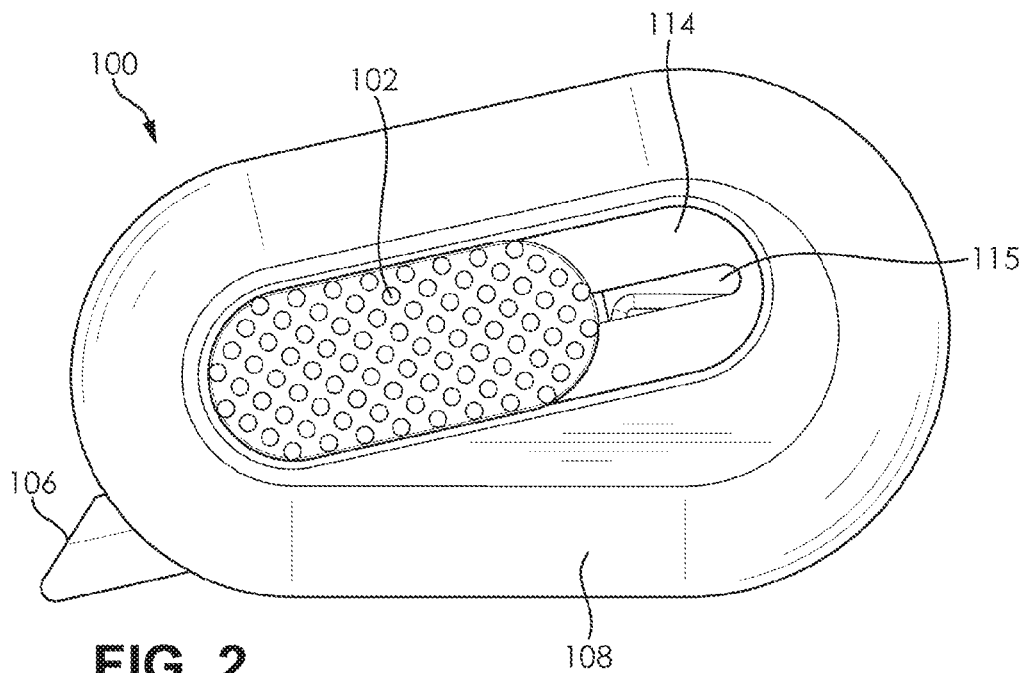
**Mar. 27, 2018**

**Sheet 1 of 8**

**US 9,925,674 B2**



**FIG. 1**



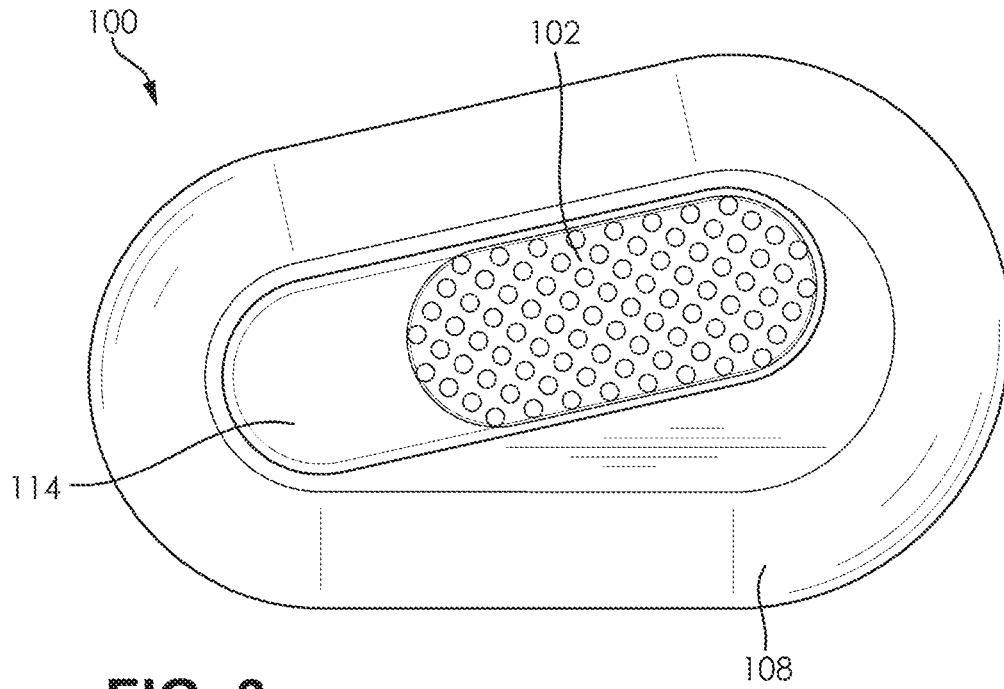
**FIG. 2**

**U.S. Patent**

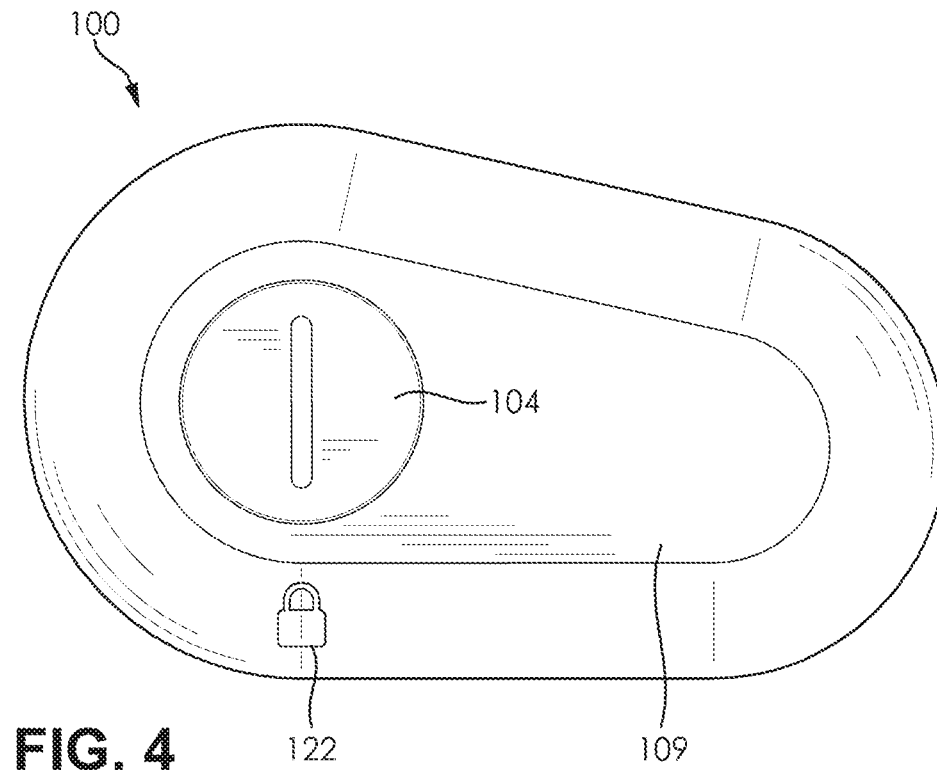
**Mar. 27, 2018**

**Sheet 2 of 8**

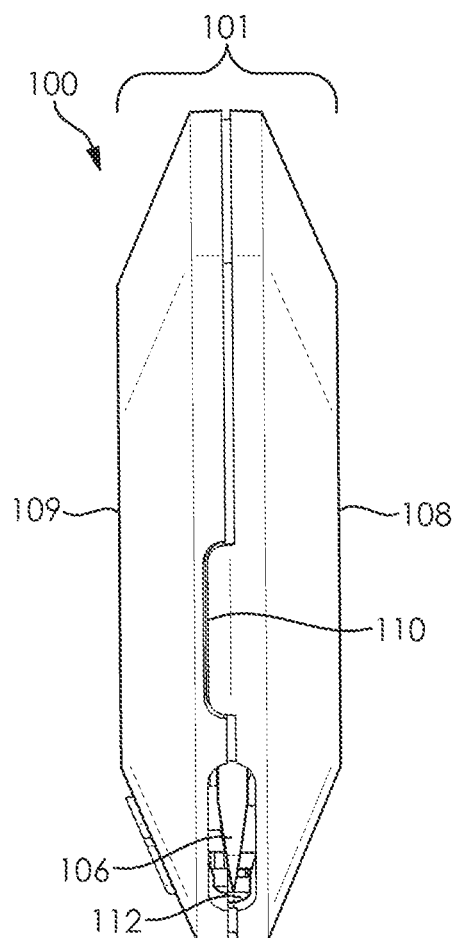
**US 9,925,674 B2**



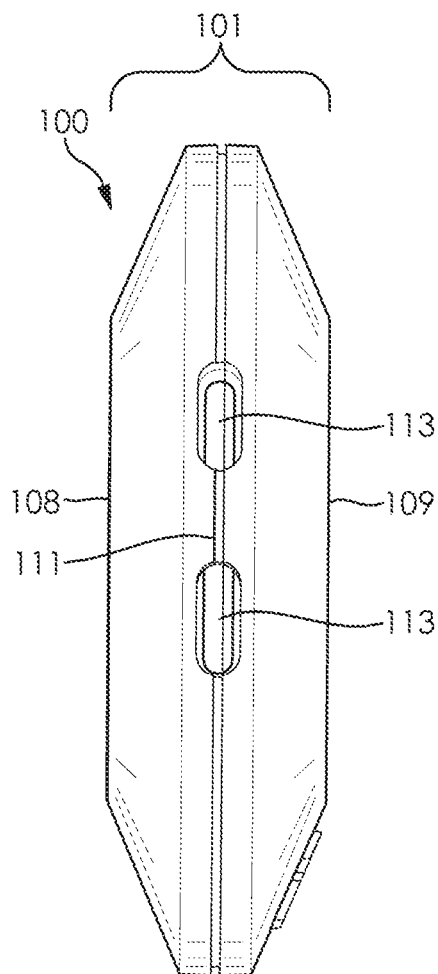
**FIG. 3**



**FIG. 4**



**FIG. 5**



**FIG. 6**

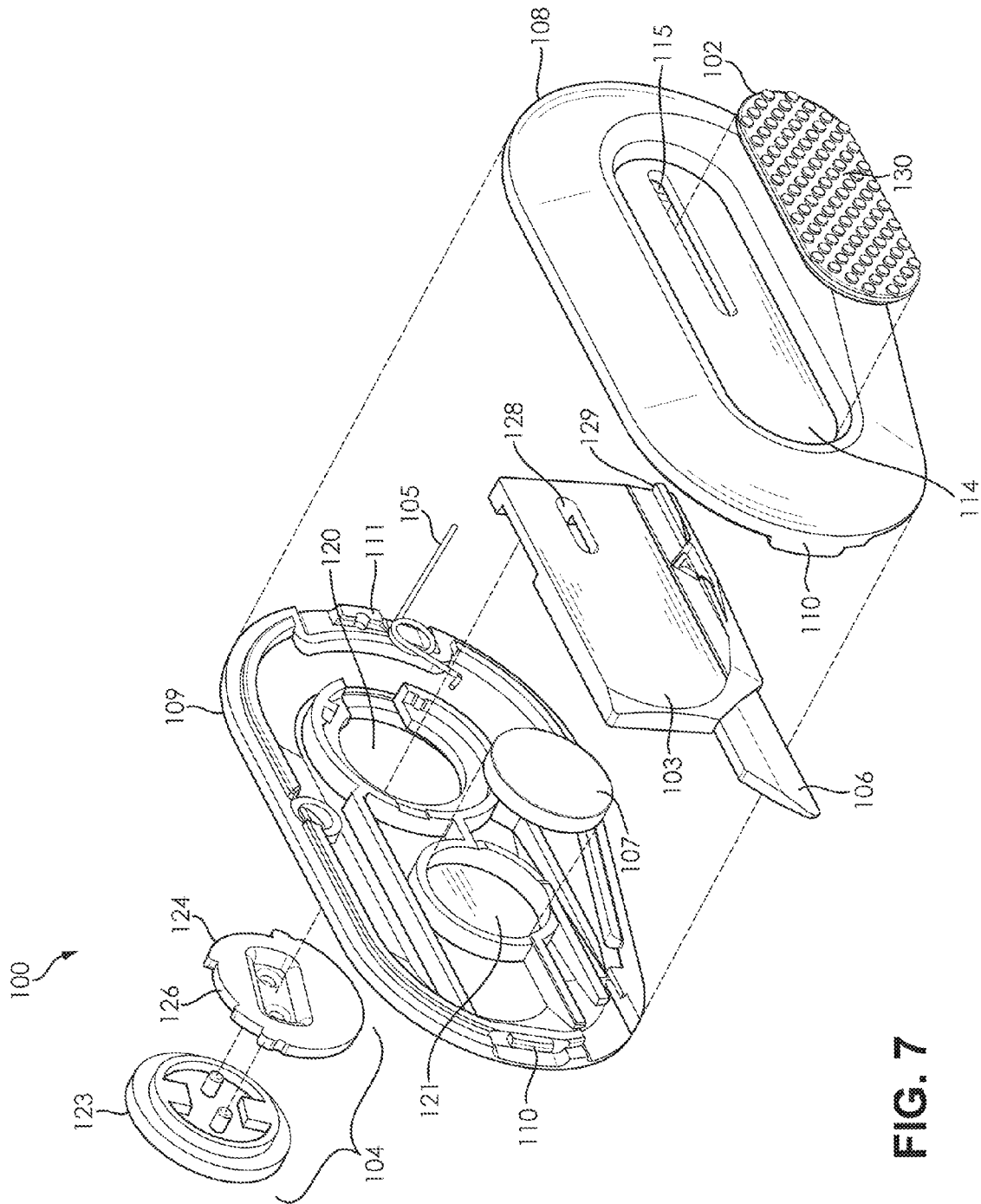


FIG. 7



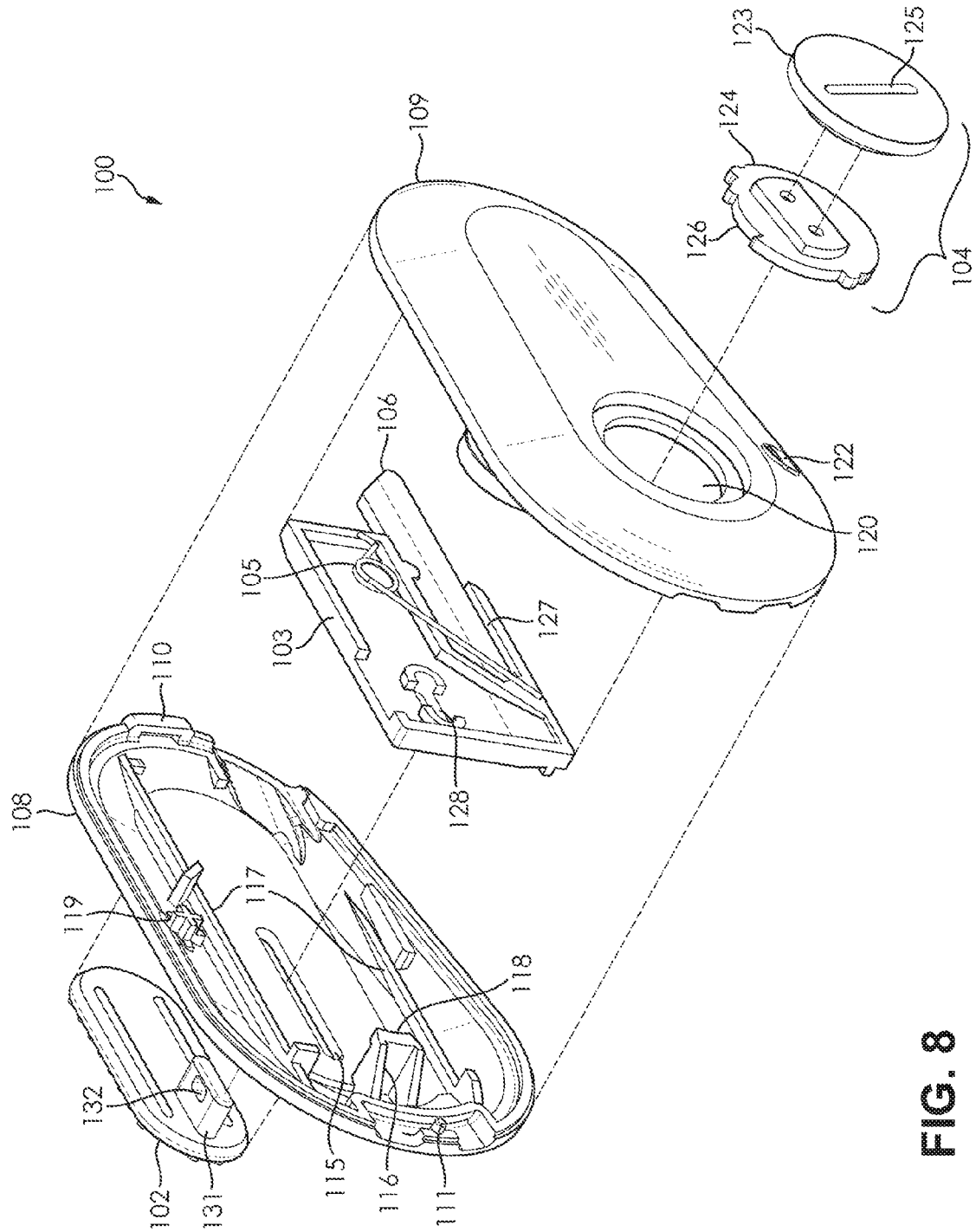
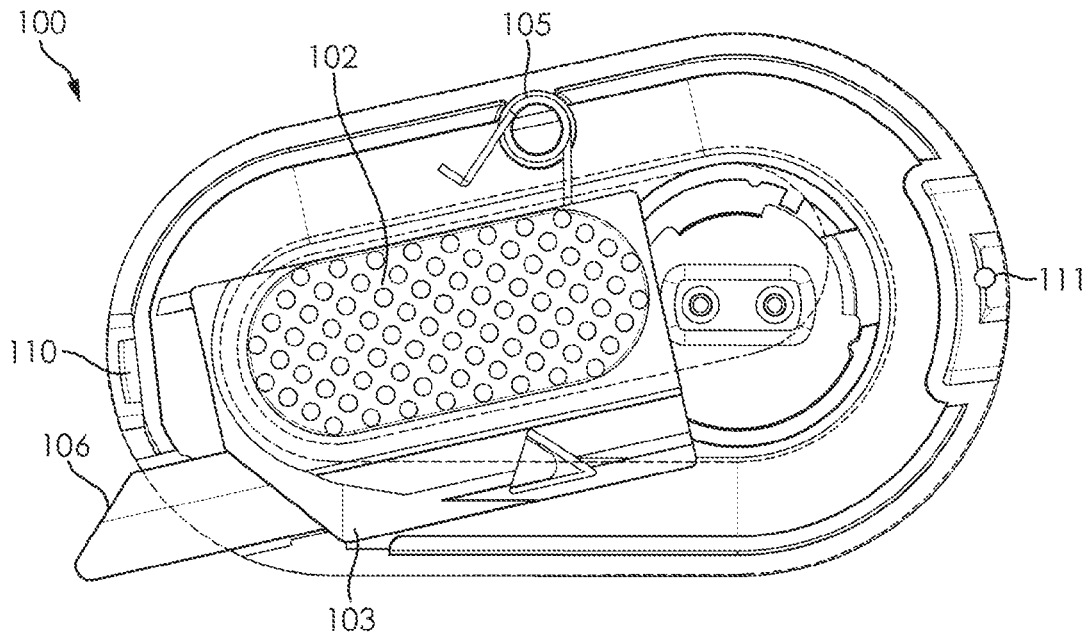
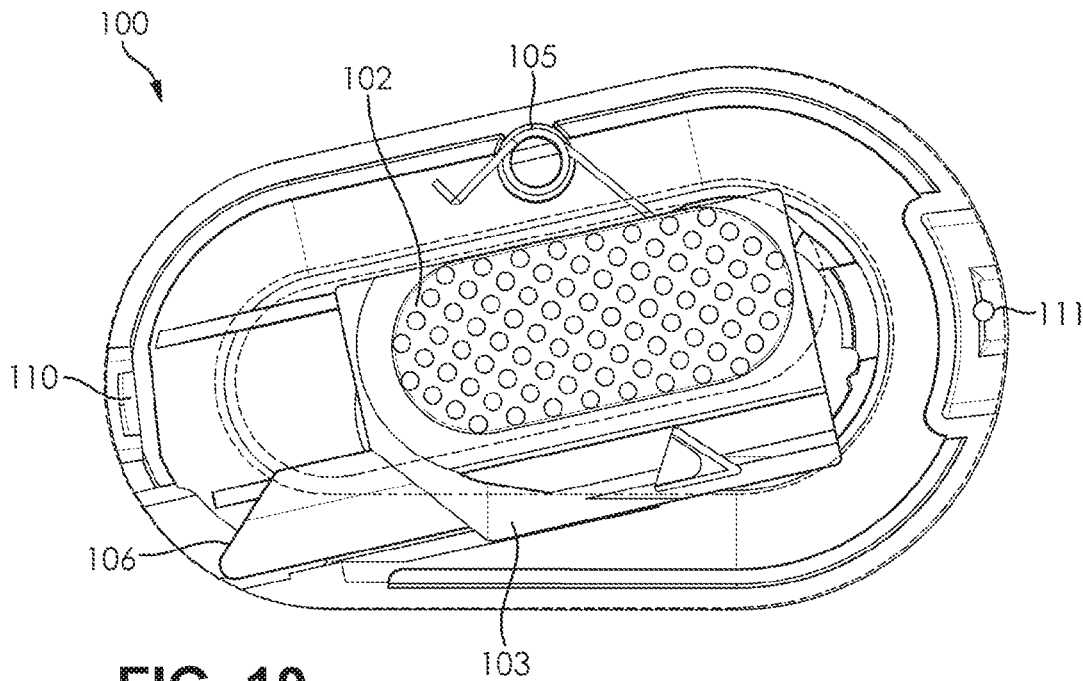


FIG. 8



**FIG. 9**



**FIG. 10**

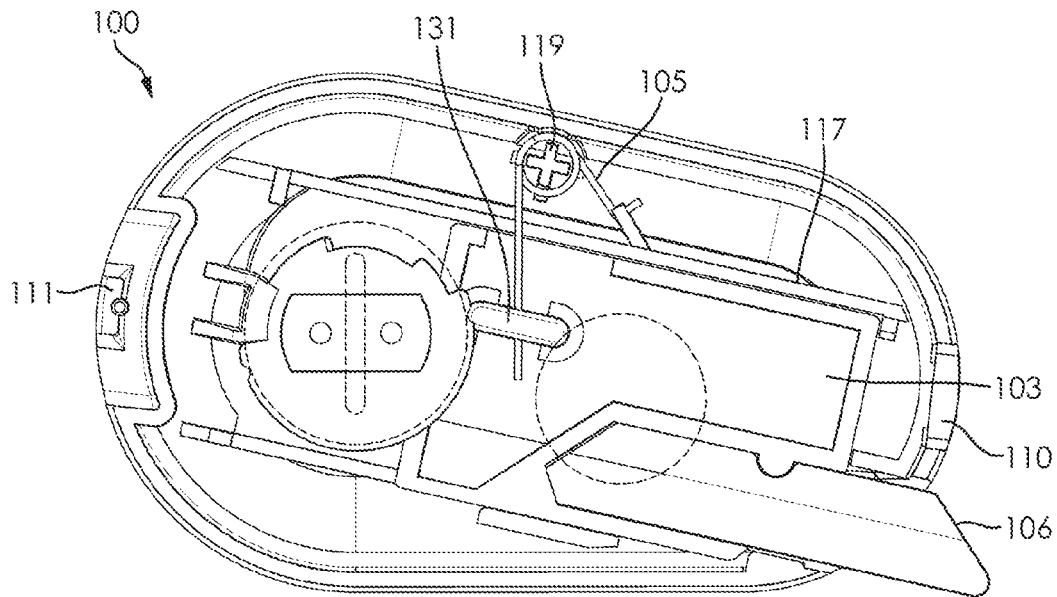


FIG. 11

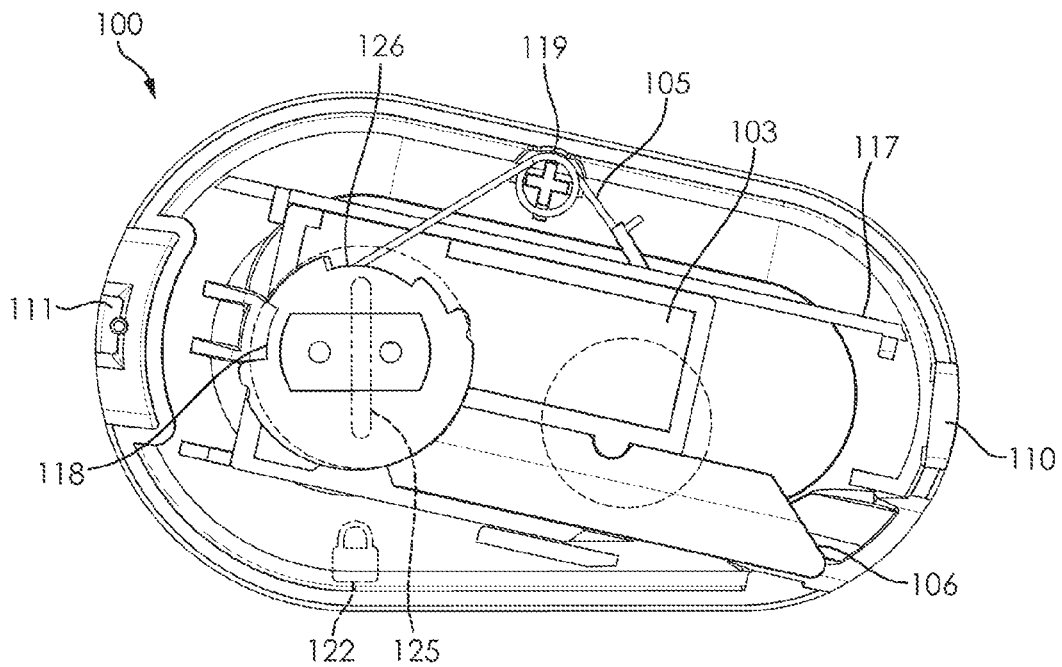
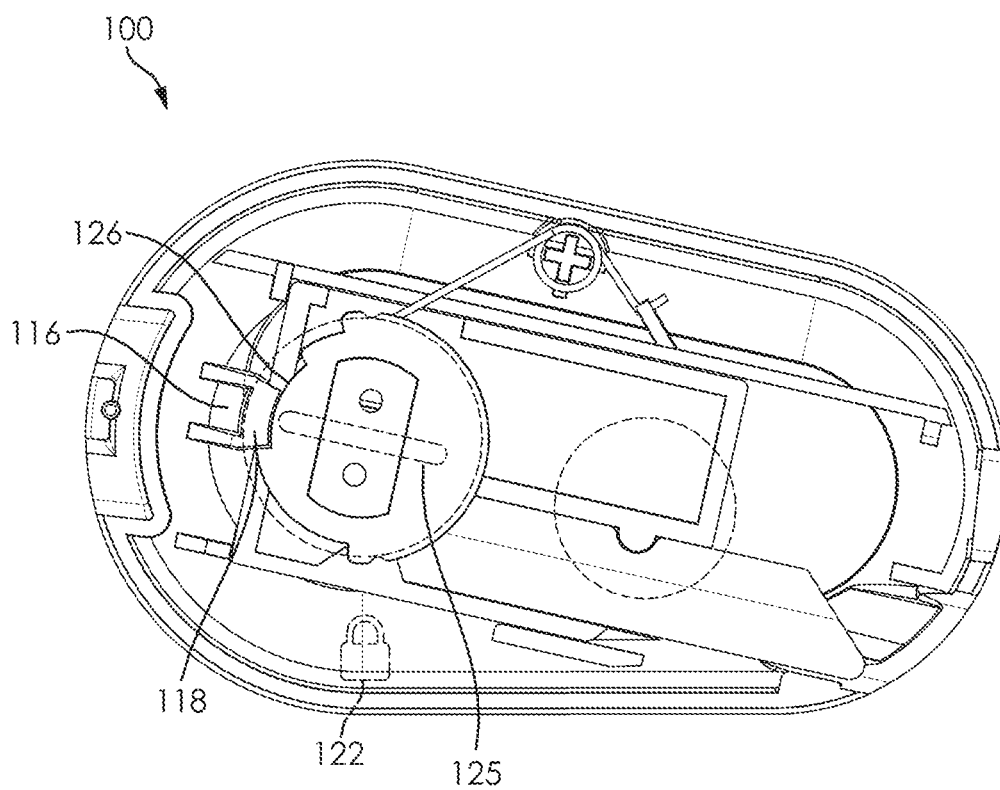


FIG. 12



**FIG. 13**

US 9,925,674 B2

1

**POCKET CUTTER****CROSS-REFERENCE TO RELATED APPLICATIONS**

This application is a continuation of U.S. patent application Ser. No. 14/106,678 filed Dec. 13, 2013 which claims the benefit of U.S. Pat. App. No. No. 61/739,712 filed on Dec. 19, 2012, each of which is hereby incorporated by reference in its entirety.

**FIELD OF THE INVENTION**

The present invention generally relates to a pocket cutter. Specifically, embodiments of the present invention relate to a pocket cutter apparatus with a retractable blade. Embodiments of the pocket cutter apparatus are further comprised of a thumb slider switch.

**BACKGROUND**

The pocket cutter is a basic cutting tool that takes on a variety of forms. As the name suggests, a typical pocket cutter is small enough to be carried in the pocket of a user. Additionally, the typical pocket cutter is a compact cutting tool with a folding or otherwise retractable blade. The average pocket cutter requires the user to unfold the blade from the handle or extend the blade with a button or other mechanism in order to lock the blade into place before using the blade. This design feature creates an increase chance of injury, as the blade is left unnecessarily exposed for extended periods of time because many users find it cumbersome and time consuming to securely retract the blade when the pocket cutter is used repeatedly in a short time span.

Current pocket cutters also pose a safety concern in how a user holds the tool. The ergonomics of a standard pocket cutter require a user to wrap their hand completely around the handle of the pocket cutter. This design creates a hazard to the user as the handle can slip through the user's hand and expose the user to the blade of the pocket cutter as it passes through the user's hand. This shortcoming is exacerbated by the fact that the blade of the pocket cutter blade remains extended as it does not automatically retract.

Therefore, there is a need in the art for a pocket cutter that incorporates automatically retracting blade and improved handle ergonomics to reduce the risk of injury. These and other features and advantages of the present invention will be explained and will become obvious to one skilled in the art through the summary of the invention that follows.

**SUMMARY OF THE INVENTION**

Accordingly, it is an aspect of the present invention to provide a pocket cutter with an automatically retracting blade. Furthermore, it is an aspect of the present invention to provide a compact cutting tool that is capable of making nimble, accurate cuts.

According to an embodiment of the present invention, a pocket cutter includes: a main body housing, including a front-half body shell configured with a switch groove slot, a rear-half body shell, and a blade outlet slot, wherein the blade outlet slot is formed at a front edge of the main body housing from a notch in each of the front-half body shell and the rear-half body shell, a blade carrier retained within the main body housing, wherein the blade carrier is configured to hold a cutting blade, a thumb slider switch configured to

2

pass through the switch groove slot in the front-half body shell and engage with the blade carrier to form a blade control unit that is movable between at least two positions, wherein a first position of the at least two positions is when the thumb slider switch and the blade carrier are in a rear position and the cutting blade is retracted within the main body housing, wherein a second position of the at least two positions is when the thumb slider switch and the blade carrier are in a forward position and the cutting blade is extended from the blade outlet slot, and a tension component configured to connect the blade control unit to an anchor point, wherein the tension component causes the cutting blade to be automatically retracted from the second position to the first position when the thumb slider is not held in the second position.

According to an embodiment of the present invention, the front-half body shell further includes a slider switch groove formed as a depression in an outer wall of the front-half body shell in which the thumb slider switch moves between the first position and the second position.

According to an embodiment of the present invention, the slider switch groove defines a movement limit boundary for the first position and the second position of the thumb slider switch.

According to an embodiment of the present invention, the switch groove slot is formed in the bottom center of the slider switch groove.

According to an embodiment of the present invention, the front-half body shell further includes a blade carrier track that is formed on the interior of the front-half body shell and is adapted to guide the blade carrier within the main body housing.

According to an embodiment of the present invention, the blade carrier further includes a carrier track alignment feature that adapted to guide the blade carrier on the blade carrier track.

According to an embodiment of the present invention, the main body housing further includes a lanyard attachment point.

According to an embodiment of the present invention, the main body housing further includes a front housing engagement means that is adapted to align and connect the front edge of the front-half body section and to the front edge of the rear-half body section.

According to an embodiment of the present invention, the main body housing further includes a rear housing engagement means that is adapted to align and connect the back edge of the front-half body section and to the back edge of the rear-half body section.

According to an embodiment of the present invention, the front-half body shell further includes a blade carrier stop formed on the interior of the front-half body shell that is adapted to stop the blade carrier when it reaches the first position.

According to an embodiment of the present invention, the rear-half body shell further includes a magnet receptacle adapted to retain a magnet.

According to an embodiment of the present invention, the pocket cutter further includes a body housing lock that is adapted to lock the front-half body shell onto the rear-half body shell.

According to an embodiment of the present invention, the rear-half body shell is adapted to retain the body housing lock at a body housing lock aperture formed in the rear-half body shell.

According to an embodiment of the present invention, the body housing lock includes a locking hub that is adapted to

US 9,925,674 B2

3

reversibly engage with a locking hub connection element on the interior surface of the front-half body shell.

According to an embodiment of the present invention, the body housing lock includes an outer cap configured with an outer cap slot that is adapted to facilitate the operation of the body housing lock.

According to an embodiment of the present invention, the tension component is a spring.

According to an embodiment of the present invention, the blade control unit and the main body housing are configured to lock the blade control unit in the second position so as to cause the cutting blade to remain extended when the thumb slider switch is released.

According to an embodiment of the present invention, the cutting blade is configured to be manually retracted when the blade control unit is manually moved from the second position to the first position.

According to an embodiment of the present invention, the at least two positions correspond to at least two cutting blade positions selected from a group of cutting blade positions comprising a fully retracted cutting blade, a partially extended cutting blade, and fully extended cutting blade.

The foregoing summary of the present invention with the preferred embodiments should not be construed to limit the scope of the invention. It should be understood and obvious to one skilled in the art that the embodiments of the invention thus described may be further modified without departing from the spirit and scope of the invention.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a pocket cutter with its blade extended in accordance with an embodiment of the present invention;

FIG. 2 is front side view of a pocket cutter with its blade extended in accordance with an embodiment of the present invention;

FIG. 3 is a front side view of a pocket cutter with its blade retracted in accordance with an embodiment of the present invention;

FIG. 4 is a rear side view of a pocket cutter with its blade retracted in accordance with an embodiment of the present invention;

FIG. 5 is a front view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 6 is a rear view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 7 is an exploded view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 8 is an alternate exploded view of a pocket cutter in accordance with an embodiment of the present invention;

FIG. 9 is front side view of a pocket cutter where the front-half of the body housing is transparent and its blade is extended in accordance with an embodiment of the present invention;

FIG. 10 is front side view of a pocket cutter where the front-half of the body housing is transparent and its blade is retracted in accordance with an embodiment of the present invention;

FIG. 11 is rear side view of a pocket cutter where the rear-half of the body housing is transparent and its blade is extended in accordance with an embodiment of the present invention;

FIG. 12 is rear side view of a pocket cutter where the rear-half of the body housing is transparent and its blade is retracted in accordance with an embodiment of the present invention; and

4

FIG. 13 is rear side view of a pocket cutter where the rear-half of the body housing is transparent and the body housing lock is unlocked in accordance with an embodiment of the present invention.

#### DETAILED SPECIFICATION

The present invention generally relates to a pocket cutter. Specifically, embodiments of the present invention relate to a pocket cutter apparatus with a retractable blade. Embodiments of the pocket cutter apparatus are further comprised of a thumb slider switch.

According to an embodiment of the present invention, the pocket cutter is comprised of a main body housing, a thumb slider switch, a blade carrier, a blade, a spring, a magnet, and a body housing lock. Certain embodiments of the present invention may include fewer components or additional components depending on the utilization and purpose for the pocket cutter.

According to an embodiment of the present invention, the main body housing of the pocket cutter is configured to receive and retain the thumb slider switch, the blade carrier, the blade, the spring, the magnet, and the body housing lock. In a preferred embodiment, the main body housing may be comprised of two corresponding halves, a front-half body shell and a rear-half body shell, that are configured to contain the other components of the pocket cutter. The preferred embodiment of the main body housing may be further comprised of a front housing engagement means and a rear housing engagement means that are configured to align and connect the front-half body shell with the rear-half body shell. Finally, the preferred embodiment of the main body housing may be comprised of a blade outlet slot (at the front edge of the pocket cutter) and a lanyard attachment point (at the rear edge of the pen cutter). In the preferred embodiment, the main body housing may be primarily flat and roughly oval in shape. One of ordinary skill in the art would appreciate that the main body housing could be designed in any number of configurations, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the main body housing of the pocket cutter is comprised of a front-half body shell. In a preferred embodiment, the front-half body shell is comprised of a slider switch groove, a switch groove slot, a blade carrier stop, and a blade carrier track. In the preferred embodiment, the slider switch groove is formed on the outer surface of the front-half body shell, while the switch groove slot is a void formed in the bottom center of the slider switch groove that creates a passage to the internal portion of the pocket cutter. Additionally, the blade carrier stop and the blade carrier track are formed on the inner surface of the front-half body shell. One of ordinary skill in the art would appreciate that there are numerous suitable configurations for the front-half body shell of the pocket cutter, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the exterior surface of the front-half body shell of the pocket cutter may be configured with a slider switch groove and a switch groove slot. In a preferred embodiment, the slider switch groove is a depression formed in the outer surface of the front-half body shell, while the switch groove slot is an opening in the outer surface of the front-half body shell that is substantially contained within the slider switch groove. In the preferred embodiment, the slider switch groove defines the movement limits of the thumb slider switch, while the



US 9,925,674 B2

5

slider button slot allows the thumb slider switch to pass through front-half body shell to engage with the blade carrier.

According to an embodiment of the present invention, the interior surface of the front-half body shell may be configured with a blade carrier stop and a blade carrier track. In a preferred embodiment, the blade carrier stop is a protrusion that extends perpendicularly from the inner surface of the front-half body shell, while the blade carrier track is a set of ribs and/or channels on the inner surface of the front-half shell. In the preferred embodiment, the blade carrier stop is adapted to limit the movement range of the blade carrier within the main body housing by defining the boundary of the retracted (or rear) position, while the blade carrier track defines and guides the movement of the blade carrier between a retracted position and an extended position. Finally, the preferred embodiment of the front-half body shell may include multiple blade carrier stops, with one or more blade carrier stops configured at the rear portion of the blade carrier track and a main blade carrier stop configured on the inner surface of the rear middle portion of front-half body shell. The preferred embodiment of the main blade carrier stop may further include a locking hub connection element that is formed at the distal end of the main blade carrier stop and is configured to engage with a corresponding component on the body housing lock.

According to an embodiment of the present invention, the pocket cutter may be configured with a tension component attachment point formed on inner surface of the main body housing. In a preferred embodiment, then tension component attachment point (or anchor point) is one or more protrusions formed on the inner surface of the front-half body shell that are adapted to connect to or otherwise receive the tension component. One of ordinary skill in the art would appreciate that there are many arrangements for a tension component attachment point, and embodiments of the present invention are contemplated for use with any such arrangement.

According to an embodiment of the present invention, the main body housing of the pocket cutter is comprised of a rear-half body shell. In a preferred embodiment, the rear-half body shell is comprised of a body housing lock aperture and a magnet receptacle. In the preferred embodiment, the body housing lock aperture is formed in the wall of the rear-half body shell to allow the body housing lock to pass through the main body housing and engage with the locking hub connection element on the blade carrier stop, while the magnet receptacle is formed on the inner surface of the rear-half body shell and is adapted to receive a magnet. Additionally, the outer surface of the rear-half body shell may further include a lock indicator that is adapted to show when the body housing lock is engaged. One of ordinary skill in the art would appreciate that are numerous suitable configurations for the rear-half body shell of the pocket cutter, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the main body housing includes a front housing engagement means and a rear housing engagement means. In a preferred embodiment, the front housing engagement means is a pair of corresponding connector elements that configured on the front portion of each of the front-half body shell and the rear-half body shell, that are adapted to connect and align the front portion of main body housing. The front housing engagement means may be configured to connect the front-half body shell to the rear-half body shell in addition to or instead of the body housing lock. In a preferred embodi-

6

ment, the rear housing engagement means is, similarly, a pair of corresponding connector elements that configured on the rear portion of each of the front-half body shell and the rear-half body shell, that are adapted to connect and align the rear portion of main body housing. The rear housing engagement means may be configured to connect the front-half body shell to the rear-half body shell in addition to or instead of the body housing lock. In the preferred embodiment, the main body housing is separable into two halves to facilitate the replacement of the cutting blade. In an alternate embodiment, however, the main body housing is not separable, and the cutting blade is replaced by extending the cutting blade through the blade outlet slot. One of ordinary skill in the art would appreciate that the each of the housing engagement could be adapted with a number of designs, and embodiments of the present invention are contemplated for use with any suitable design.

According to an embodiment of the present invention, the main body housing is comprised of a blade outlet slot and a lanyard attachment point. In a preferred embodiment, the blade outlet slot is formed on the edge of the front portion of the main body housing. In particular, a notch in the edges of each of the front-half body shell and rear-half body shell collectively form the blade outlet slot when the two halves are connected together. Similarly, in a preferred embodiment, the lanyard attachment point is formed on the edge of the rear portion of the main body housing. In particular, one or more notches in the edges of each of the front-half body shell and rear-half body shell collectively form the lanyard attachment point when the two halves are connected together.

According to an embodiment of the present invention, the pocket cutter may include a body housing lock. In a preferred embodiment, the body housing lock is comprised of an external outer cap and an internal locking hub. In the preferred embodiment, the body housing lock is retained within the body housing lock aperture of the rear-half body shell and is configured to reversibly connect to the locking hub connection element on the blade carrier stop. Specifically, the outer cap is retained within the outer surface of the rear-half body shell and is connected to the locking hub, which is retained on at the inner surface of the rear-half body shell. In the preferred embodiment, when the body housing lock is engaged it causes the rear-half body shell to be securely connected to the front-half body shell and, furthermore, serves as an additional means of securing the blade in the blade carrier. The body housing lock may be engaged with a twist-lock connection, a snap connection, or a screw-type connection. In alternate embodiments, the body housing lock may be comprised of additional or fewer components. One of ordinary skill in the art would appreciate that there are many suitable designs for a body housing lock, and embodiments of the present invention are contemplated for use with any such design.

According to an embodiment of the present invention, the body housing lock is comprised of an outer cap. In a preferred embodiment, the outer cap is substantially disk-shaped component that is adapted to be retained with the wall of the rear-half body shell, such that the outer cap is flush with the outer surface of the rear-half body shell. The outer cap may be further adapted with a slot to assist the user with engaging and disengaging the body housing lock. In the preferred embodiment a user will twist the outer cap, which in turn causes the locking hub to selective engage with the front-half body shell (i.e. via the locking hub connection element on the blade carrier stop).

US 9,925,674 B2

7

According to an embodiment of the present invention, the body housing lock is comprised on a locking hub. In a preferred embodiment, the locking hub is a primarily dish-shaped component that is adapted to connect to the outer cap and reversibly engage with the locking hub connection element on the blade carrier stop. In the preferred embodiment, the locking hub may be configured with a series of notches and/or projections that correspond to similar features on the body housing lock aperture to define the movement limits of the body housing lock. More importantly, those notches and/or projections allow the locking hub to receive the locking hub connection element and then for the locking hub to be twisted so that the lip of the locking hub connection element is held firmly under the lip of the locking hub.

According to an embodiment of the present invention, the pocket cutter may include a blade carrier. In a preferred embodiment, the blade carrier may be comprised of a blade holder, a slider switch engagement point, and a carrier track alignment feature. In the preferred embodiment, the blade holder is configured to retain a cutting blade, while the slider switch engagement point is configured to connect to the thumb slider switch. In the preferred embodiment, the carrier track alignment feature may be adapted to engage with the blade carrier track of the main body housing in a way that allows the blade carrier to be aligned to slide forward and backward within the main body housing. One of ordinary skill in the art would appreciate that the blade carrier could be designed with a number of configurations, and embodiments of the present invention are contemplated for use with any such configuration.

According to an embodiment of the present invention, the pocket cutter may include a thumb slider switch. In a preferred embodiment, the thumb slider switch is comprised of an actuator portion and a blade carrier connector post. In a preferred embodiment, the top actuator portion may be generally flat and oval in shape with a textured surface on its front face that is adapted to improve grip between the thumb slider switch and the thumb of a user. Additionally, in the preferred embodiment, the blade carrier connector post extends perpendicularly off the rear of the thumb slider switch and is configured to pass through the switch groove slot and engage with the slider switch engagement point on the blade carrier. The thumb slider switch is further secured to the blade carrier when a portion of the spring engages with an attachment point on the blade carrier connector post (i.e. connector post securing point). In the preferred embodiment, when the thumb slider switch is connected to the blade carrier, the pair collectively forms the blade control unit. One of ordinary skill in the art would appreciate that there are many suitable designs for a thumb slider switch, and embodiments of the present invention are contemplated for use with any such design.

According to an embodiment of the present invention, the blade control unit may be used to extend and retract the cutting blade of the pocket cutter. In particular, when the thumb slider switch connects with the blade carrier to form the blade control unit, the thumb slider switch may then be used to slide the blade carrier forward and backward within the main body housing, consequently causing the blade to extend and retract, respectively. In a preferred embodiment, a user will push the thumb slider switch forward, thereby causing the blade carrier within the main body housing of the pocket cutter to be moved forward. With the blade carrier in the forward position, the blade will then be in an extended position through the blade outlet slot of the pocket cutter. When the thumb slider switch is released or otherwise

8

returned to the rear or retracted position, the blade carrier will likewise be returned to the retracted position causing the blade to be returned to the inside of the main body section of the pocket cutter.

According to an embodiment of the present invention, the pocket cutter may include a tension component. In a preferred embodiment, the tension component is a spring and is adapted to facilitate the retraction and extension of the cutting blade. In the preferred embodiment, the tension component attaches to tension component attachment point on the main body housing and the connector post securing point on the blade carrier connector post. In alternate embodiments, the tension component may be an elastic component or other resilient connector. One of ordinary skill in art would appreciate that there are numerous types and configurations for a tension component, and embodiments of the present invention are contemplated for use with any such tension component.

According to an embodiment of the present invention, the pocket cutter has an auto-retracting blade. In a preferred embodiment, the blade of the pen cutter can be extended by sliding a thumb slider switch forward. Applying forward pressure to the thumb slider switch causes creates compression or tension (distortion from the neutral state) in a spring or other tension component that is connectively linked to the blade of the pen cutter via the blade carrier. When the thumb slider switch is released, the compression (or tension) in the spring (or other tension component) causes the blade of the pocket cutter to be retracted as the spring returns to its unbiased or neutral state. One of ordinary skill in the art would appreciate that there are many methods to creating an automatically retracting blade, and embodiments of the present invention are contemplated for use with any such method.

According to an embodiment of the present invention, the pocket cutter has a manually retracting blade. In a preferred embodiment, the blade of the pocket cutter can be extended by pushing a thumb slider switch forward, as the thumb slider switch is connectively linked to the blade via the blade carrier. In one embodiment, the blade can be incrementally extended to cut through materials of varying thicknesses. Accordingly, the thumb slider switch may function in a ratchet-like fashion to lock at multiple positions that correspond to the varying extension of the blade. To extend or retract the blade, the thumb slider switch would be depressed and moved to the appropriate position. Once the blade is extended or retracted to the appropriate position, the thumb slider switch could then be released and the blade would be locked into that position. In an alternate embodiment, the thumb slider switch may be lockable in a forward position so as to cause the blade to remain extended despite pressure from a tension component. In said embodiment, when the thumb slider switch is released from the locked position, the blade will be automatically retracted within the main body section of the pocket butter. The blade may be locked in the forward position by any suitable locking means including, but not limited to, a friction fit, a latching mechanism, or a ratcheting mechanism.

According to an embodiment of the present invention, the pocket cutter may include a magnet. In a preferred embodiment, the magnet is secured to the magnet receptacle that is formed on the inner surface of the rear-half body shell. The magnet may be useful for any variety of tasks, including, but not limited to, holding or securing replacement blades, securing or storing the pocket cutter on magnetic surface, or picking up small magnetic objects, such as nails, screws, or other intricate objects.



## US 9,925,674 B2

9

According to an embodiment of the present invention, the pocket cutter may include a blade. In a preferred embodiment, the blade may be removably engaged with the blade carrier. The blade may be made from any suitable material, including, but not limited to, metal, ceramic, or any combination thereof. One of ordinary skill in the art would appreciate that there are numerous configurations and materials that might be used for the blade, and embodiments of the present invention are contemplated for use with any such material or configuration.

According to an embodiment of the present invention, the blade that is used may be constructed from a ceramic material that is capable of withstanding extended use without becoming dull or unusable. Ceramic materials appropriate for such construction include, but are not limited to, Zirconium Oxide. One of ordinary skill in the art would appreciate that there are numerous ceramic materials that could be utilized with embodiments of the present invention.

According to an embodiment of the present invention, the blades used in the pocket cutter may contain rounded tips to reduce the chance of injury.

Turning now to FIG. 1, a perspective view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing **101**, a thumb slider switch **102**, a blade carrier (not shown), a body housing lock (not shown), a spring (not shown), a blade **106**, and a magnet (not shown). In this view, the thumb slider switch **102** can be seen resting in the slider switch groove **114**.

Turning now to FIG. 2, a front side view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing, a thumb slider switch **102**, a blade carrier (not shown), a body housing lock (not shown), a spring (not shown), a blade **106**, and a magnet (not shown). In this view, the thumb slider switch **102** can be seen in a forward position in the slider switch groove **114** that is located on the front-half body shell **108**. When the thumb slider switch **102** is in the forward position, the blade **106** is extended.

Turning now to FIG. 3, a front side view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing, a thumb slider switch **102**, a blade carrier (not shown), a body housing lock (not shown), a spring (not shown), a blade (not shown), and a magnet (not shown). In this view, the thumb slider switch **102** can be seen in a rear position in the slider switch groove **114** that is located on the front-half body shell **108**. When the thumb slider switch **102** is in the rear position, the blade (not shown) is extended.

Turning now to FIG. 4, a rear side view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing, a thumb slider switch (not shown), a blade carrier (not shown), a body housing lock **104**, a spring (not shown), a blade (not shown), and a magnet (not shown). In this view, the body housing lock **104**, which is located on the rear-half body shell **109**, can be seen in the locked position, with the slot of the locking cap **104** pointing at the lock indicator **122**.

Turning now to FIG. 5, a front view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing **101**. In the preferred embodiment, the main body housing **101** is comprised of a front-half body shell **108** and a rear-half body shell **109**. The front portions

10

of the front-half body shell **108** and a rear-half body shell **109** are connected through the front housing engagement means **110**. The front of the main body housing **101** is also configured with a blade outlet slot **112** through which the cutting blade **106** extends.

Turning now to FIG. 6, a rear view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is comprised of a main body housing **101**. In the preferred embodiment, the main body housing **101** is comprised of a front-half body shell **108** and a rear-half body shell **109**. The rear portions of the front-half body shell **108** and a rear-half body shell **109** are connected through the rear housing engagement means **111**. The front of the main body housing **101** is also configured with lanyard attachment point **113**.

Turning now to FIG. 7, a front exploded view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the main components that comprise the pocket cutter **100** are a main body housing, a thumb slider switch **102**, a blade carrier **103**, a body housing lock **104**, a spring **105**, a blade **106**, and a magnet **107**. The main body housing is comprised of a the main body housing **101**, which substantially contains the other components, is comprised of a front-half body shell **108** and a rear-half body shell **109** which are joined to each other through a combination of the body housing lock **104**, the front housing engagement means **110**, and the rear housing engagement means **111**. The body housing lock **104**, is comprised of an outer cap **123** and a locking hub **124**. The rear-half body shell **109** is adapted to retain the body housing lock **104** at the body housing lock aperture **120** and the magnet **107** at the magnet receptacle **121**. The front-half body shell **108** is configured with a slider switch groove **114** where the thumb slider switch **102** rests and a switch groove slot **115** through which the thumb slider switch **102** passes to engage with the slider switch engagement point **128** on the blade carrier **103**. The thumb slider switch **102** is further configured with a textured actuator portion **130** that provides a user to main a firm grip on the thumb slider switch **102**. The blade carrier **103** is further configured with a carrier track alignment feature **129** that is configured to guide the blade carrier **103** on the blade carrier track (not shown).

Turning now to FIG. 8, a rear exploded view of a pocket cutter, in accordance with an embodiment of the present invention. In a preferred embodiment, the main components that comprise the pocket cutter **100** are a main body housing, a thumb slider switch **102**, a blade carrier **103**, a body housing lock **104**, a spring **105**, a blade **106**, and a magnet **107**. The main body housing is comprised of a the main body housing **101**, which substantially contains the other components, is comprised of a front-half body shell **108** and a rear-half body shell **109** which are joined to each other through a combination of the body housing lock **104**, the front housing engagement means **110**, and the rear housing engagement means **111**. The body housing lock **104**, is comprised of an outer cap **123** and a locking hub **124**. The front-half body shell **108** is configured with a switch groove slot **115** through which the blade carrier connector post **131** of the thumb slider switch **102** passes to engage with the slider switch engagement point **128** on the blade carrier **103**. Once passing through the slider switch engagement point **128**, the thumb slider switch **102** is secured in place when the long arm of the spring **105** passes through the connector post attachment point **132** on the blade carrier connector post **131** (See also FIG. 11). The front-half body shell **108** is further adapted with a blade carrier stop **116**, a blade carrier track **117**, a locking hub connection element **118**, and

US 9,925,674 B2

11

a tension component attachment point **119**. In the preferred embodiment, the locking hub connection element **118** is configured at the distal end of the blade carrier stop **116**. The locking hub connection element **118** is configured to interact with the locking hub **124** of the body housing lock **104**. The blade carrier track **117** is adapted to cooperate with the carrier track alignment feature (not shown) to properly guide the blade carrier **103**. The blade carrier **103** is further configured with a blade holder **127** adapted to secure the cutting blade **106**. The rear-half body shell **109** is adapted to retain the body housing lock **104** at the body housing lock aperture **120** and is further configured with a lock indicator **122** to indicate when the status of the body housing lock **104** (i.e. locked or unlocked).

Turning now to FIG. **9**, a front side view of a pocket cutter with a transparent front-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button **102** is moved to the forward position, the blade carrier **103** is moved forward (and therefore the blade **106** is extended) and the spring **105** is compressed. As long as a user maintains forward pressure on the slider button **102**, the blade **106** will remain extended against the tension of the spring **105**. When the slider button **102** is released, the tension in the spring **105** causes the blade carrier **103** and the cutting blade **106** to be automatically retracted.

Turning now to FIG. **10**, a front side view of a pocket cutter with a transparent front-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button **102** is in the rear position, the blade carrier **103** is also in the rear position (and therefore the blade **106** is retracted) and the spring **105** is relaxed.

Turning now to FIG. **11**, a rear side view of a pocket cutter with a transparent rear-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button (not shown) is in the rear position, the blade carrier **103** is also in the rear position (and therefore the blade **106** is retracted) and the spring **105** is relaxed. Additionally, in this view (along with FIG. **12**), it can be clearly seen how the blade carrier track **117** guides the blade carrier **103**. Finally, this view also shows how, in the preferred embodiment, the spring **105** is attached to the tension component attachment **119** on the front-half body shell and then to the connector post securing point (not shown) on the blade carrier connector post **131** of the thumb slider switch.

Turning now to FIG. **12**, a rear side view of a pocket cutter with a transparent rear-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** features an automatically retracting blade. In the preferred embodiment, when the slider button **102** is moved to the forward position, the blade carrier **103** is moved forward (and therefore the blade **106** is extended) and the spring **105** is compressed. As long as a user maintains forward pressure on the slider button **102**, the blade **106** will remain extended against the tension of the spring **105**. When the slider button **102** is released, the tension in the spring **105** causes the blade carrier **103** and the cutting blade **106** to be automatically retracted. Additionally, in this view (along with FIG. **11**), it can be clearly seen how the blade carrier track **117** guides the blade carrier **103**. Finally, this view also demonstrates how the body housing

12

lock functions. In a preferred embodiment, the front-half body shell is locked together with the rear-half body shell when the locking hub engagement element **118** is held behind the locking hub. The status of the body housing lock being firmly secured is confirmed by the fact that the outer cap slot **125** is aligned with the lock indicator **122**.

Turning now to FIG. **13**, a rear side view of a pocket cutter with a transparent rear-half body shell, in accordance with an embodiment of the present invention. In a preferred embodiment, the pocket cutter **100** is configured with a body housing lock that secures the front-half body shell together with the rear-half body shell. In a preferred embodiment, the front-half body shell is unlocked from the rear-half body shell when the locking hub engagement element **118** is released (or no longer blocked by) the locking hub. In a preferred embodiment, the body housing lock is rotated so that the locking hub is in a position where the locking hub notch **126** is centered on the locking hub engagement element **118**. This positioning of the locking hub notch **126** allows the locking hub engagement element **118** to move freely past the locking hub of the body housing lock, therefore allowing the front-half body shell and the rear-half body shell to be separated. The status of the body housing lock being unlocked is confirmed by the fact that the outer cap slot **125** is no longer aligned with the lock indicator **122**.

It should be noted that the features illustrated in the drawings are not necessarily drawn to scale, and features of one embodiment may be employed with other embodiments as the skilled artisan would recognize, even if not explicitly stated herein. Descriptions of well-known components and processing techniques may be omitted so as to not unnecessarily obscure the embodiments.

While multiple embodiments are disclosed, still other embodiments of the present invention will become apparent to those skilled in the art from this detailed description. The invention is capable of myriad modifications in various obvious aspects, all without departing from the spirit and scope of the present invention. Accordingly, the drawings and descriptions are to be regarded as illustrative in nature and not restrictive.

The invention claimed is:

1. A blade actuation control unit for use in pocket cutter, the blade actuation control unit comprising:
  - a slider button connected to a blade carrier by a connector post, wherein said slider button is configured to move said blade carrier transversely along a transverse groove of a housing;
  - wherein said connector post includes an aperture and wherein said connector post extends through said transverse groove of said housing and through a slot in said blade carrier such that said aperture extends beyond said blade carrier slot to an interior side of said blade carrier; and
  - a tension component, wherein said tension component includes a short arm and a long arm, wherein said long arm extends through the connector post aperture on said interior side of said blade carrier.
2. The blade actuation control unit of claim 1, wherein said tension component is mounted to a wall of said housing.
3. The blade actuation control unit of claim 1, wherein said housing includes a slider button groove that defines a movement limit boundary for said slider button.
4. The blade actuation control unit of claim 1, wherein said housing includes a blade carrier track formed on an interior of said housing and is adapted to guide said blade carrier within said housing.

## US 9,925,674 B2

## 13

5. The blade actuation control unit of claim 4, wherein said blade carrier includes a carrier track alignment feature adapted to guide said blade carrier on said blade carrier track.

6. The blade actuation control unit of claim 1, wherein said blade carrier is formed with a depression that is configured to retain a cutting blade.

7. The blade actuation control unit of claim 1, further comprising a body housing lock.

8. The blade actuation control unit of claim 7, wherein said housing comprises a front-half body shell and a rear-half body shell joined together to form said housing, wherein said front-half body shell and rear-half body shell may be separated when said body housing lock is in an unlocked position.

9. The blade actuation control unit of claim 1, further comprising:


## 14

a blade carrier stop that extends from an inner surface of said housing and is adapted to limit the movement range of the blade carrier within the housing, said blade carrier stop comprising a lip portion; and


a body housing lock comprising an outer cap and a locking hub coaxially connected thereto, said outer cap defining a single linear slot configured to receive a flat member used to rotate the body housing lock into an unlocked position in which the housing can be opened and a locked position in which the housing cannot be opened, wherein said locked position is achieved by rotating the locking hub until said lip portion of said blade carrier stop is held behind a peripheral edge of the locking hub and said unlocked position is achieved by rotating the locking hub until a notch in said locking hub overlaps said lip portion.

\* \* \* \* \*

# EXHIBIT D



Home
My Network
Jobs
Messaging



**Chris Alagno** • 3rd

Vice President, Acme United  
Greater New York City Area

[Message](#) [...](#)


**Acme United Corporation**

**University of New Haven**

[See contact info](#)

462 connections


PRODUCT DEVELOPMENT / MARKETING / SALES/ BUSINESS DEVELOPMENT / GENERAL MANAGEMENT  
Talented, results producing professional with a proven track record of accomplishments in planning and leading comprehensive business strategies in support of corporate goals and company missions. Expertise in directing and creating marketing and sales strategies and implementing them to drive the overall goals of the organizations. Demonstrated success driving growth in targeted markets through implementation of strategic goals. Solid leadership skills; able to build and guide top performing sales, marketing and operations teams.




Home
My Network
Jobs
Messaging

Show less


### Experience




**Vice President**  
Acme United Corporation  
Jan 2015 – Present • 3 yrs 6 mos




**Director of Product Marketing**  
Stanley Black & Decker, Inc.  
Jul 2013 – Dec 2014 • 1 yr 6 mos  
New Britain CT




**Director of Channel Marketing**  
Stanley Black & Decker, Inc.  
Dec 2012 – Aug 2013 • 9 mos  
New Britain



**Senior Marketing Channel Manager**  
Stanley Black & Decker, Inc.  
Feb 2011 – Dec 2012 • 1 yr 11 mos




**Global Product Manager**  
Stanley Black and Decker




Home
My Network
Jobs
Messaging


### Education



**University of New Haven**  
Master of Business Administration (M.B.A.), MBA  
2000 – 2002



**The University of Connecticut**  
BS, Finance / Marketing  
1993 – 1997



**st. Joseph high school**


### Skills & Endorsements

Cross-functional Team Leadership • 23

Endorsed by John Castellino and 6 others who are highly skilled at this

Endorsed by 15 of Chris' colleagues at Stanley Black & Decker, Inc.

Product Marketing • 20



Home
My Network
Jobs
Messaging


Marketing • 19

Endorsed by 13 of Chris' colleagues at Stanley Black & Decker, Inc.

Show more


### Recommendations

Received (1) Given (1)



**Lou Morabito**  
Retired


Chris is a thought leader with precision planning and execution skills. He knows his customers needs, product offerings, and quality.




Home
My Network
Jobs
Messaging

Chris is highly respected through his integrity and attention to all details.


### Interests




**Acme United Corporation**  
1,347 followers




**Sales & Marketing**  
37,236 members




**CT / Connecticut Business Referral ...**  
1,922 members



**Under Armour**  
385,358 followers



**University of Connecticut**  
160,646 followers



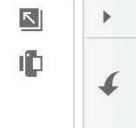
**Stanley Black & Decker, Inc.**  
160,680 followers

See all

# EXHIBIT E

Contact message from chris alagno on Tuesday, January 20, 2015 - 10:56

SAI  
c.al  
Som  
disp  
relo  
Help



**www.sliceproducts.com** <services@slicehome.com>

to services

Submitted on Tuesday, January 20, 2015 - 10:56

Submitted by anonymous user: [47.22.146.234]

Submitted values are:

Your Name: chris alagno

Email: [c.alagno@acmeunited.com](mailto:c.alagno@acmeunited.com)

Subject: request for information

Message:

hi

I'm the VP at Acme United in CT. we have the top brand in office supplies called Westcott. we mainly focus on scissors but was interest in some of your products. can you please contact me to understand any potential business opportunities with our two companies.

Regards, Chris 203-913-6448

The results of this submission may be viewed at:

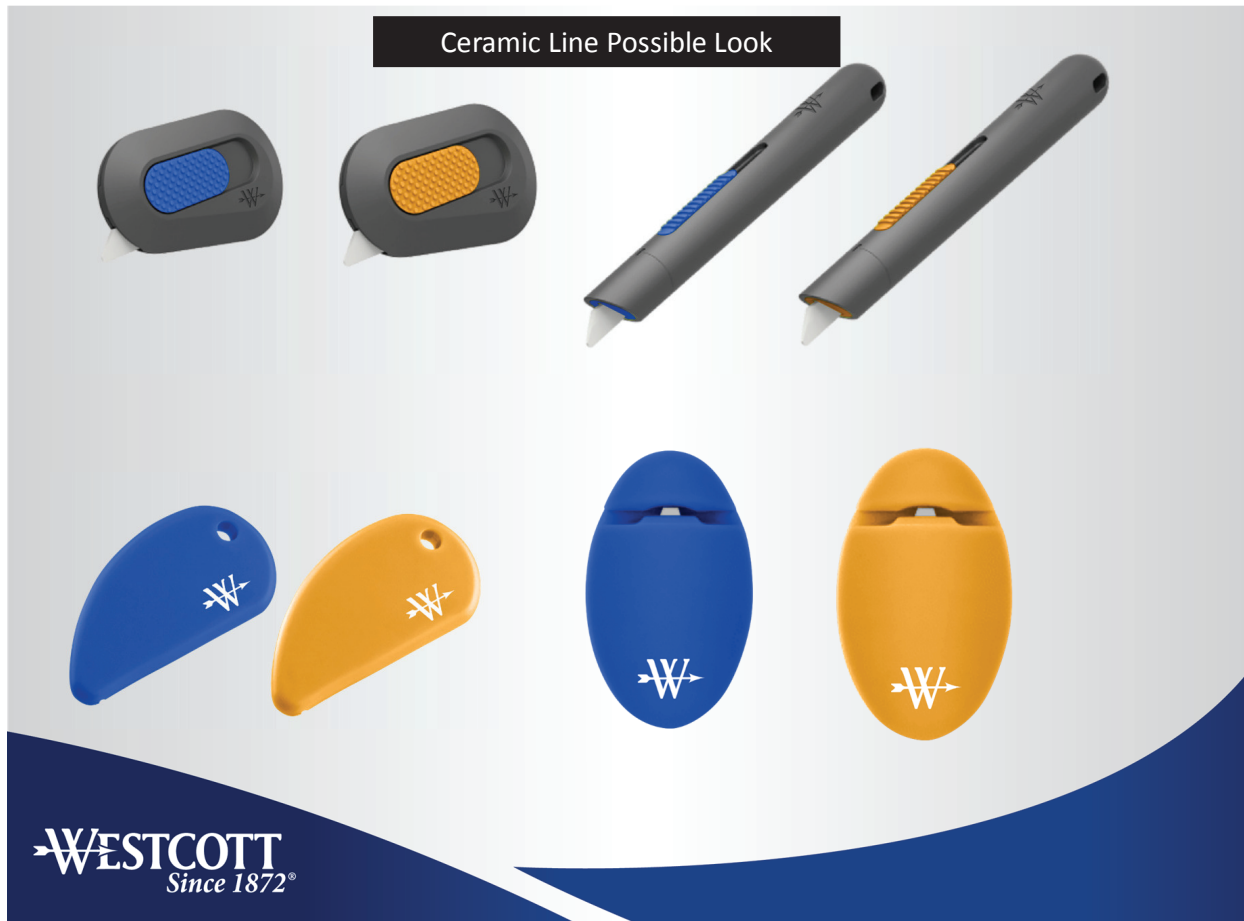
<http://www.sliceproducts.com/node/280/submission/1214>

**NetSuite**

[Setup NetSuite Connector](#)

# EXHIBIT F





# EXHIBIT G

MUTUAL NONDISCLOSURE AGREEMENT

JAN '15 THIS MUTUAL NONDISCLOSURE AGREEMENT is made and entered into as of the 21 day of ~~December, 2014~~, by and between SLICE INC, a ~~DELAWARE~~ corporation, and Acme United Corporation, ("Acme United"), a Connecticut corporation.

WHEREAS, the parties intend to exchange information including but not limited to technical data, marketing information, intellectual property, trade secret, business information, pricing or other information which may include confidential information, all for the purpose of exploring future potential business relationships to the mutual benefit of the parties. With respect to all such information, including any reports or other documents resulting from such exchange of information between the parties, each of the parties agrees as follows:

1. "Confidential Information" means all information provided by the disclosing party (the "Disclosing Party") to the receiving party ("Receiving Party") in tangible or intangible form which the Disclosing Party desires to protect from disclosure, and includes visual and other information obtained from site visits, including any and all intellectual property and trade secrets. If the Receiving Party is uncertain whether information is confidential, such information shall be treated as confidential.
2. The Receiving Party shall not, without prior written permission of the Disclosing Party, furnish to any third party any information, equipment or material embodying or made by use of any Confidential Information received or developed hereunder nor use such information for purposes other than internal evaluation so long as such Confidential Information must be maintained confidential. All Confidential Information in tangible form, and any copies thereof, disclosed hereunder, shall be promptly returned or destroyed upon written request of the Disclosing Party.
3. The Receiving Party shall protect the disclosed Confidential Information by using the same degree of care as it uses to protect its own Confidential Information, but no less than a reasonable degree of care, to prevent the unauthorized use, dissemination or publication of the Confidential Information.
4. All Confidential Information is and shall remain the property of the Disclosing Party. This Agreement shall not be construed as granting or conferring any rights to license, either express, implied, or otherwise, for any invention, discovery or improvement made, conceived or acquired prior to or after the date of this Agreement.
5. Neither party shall disclose the other party's Confidential Information to anyone other than employees or advisors who have a strict need-to-know, and prior to disclosure to advisors, such advisors shall be required to sign a nondisclosure agreement providing equivalent protection as is provided under this Agreement.
6. Either party may terminate this Agreement with or without cause upon 90 days' prior written notice to the other party. All sections of this Agreement relating to the rights and obligations of the parties concerning Confidential Information disclosed during the term of the Agreement shall survive any such termination.

IN WITNESS WHEREOF, the parties hereto have respectively caused this Mutual Non-disclosure Agreement to be executed by their duly authorized representatives as of the date first mentioned above.

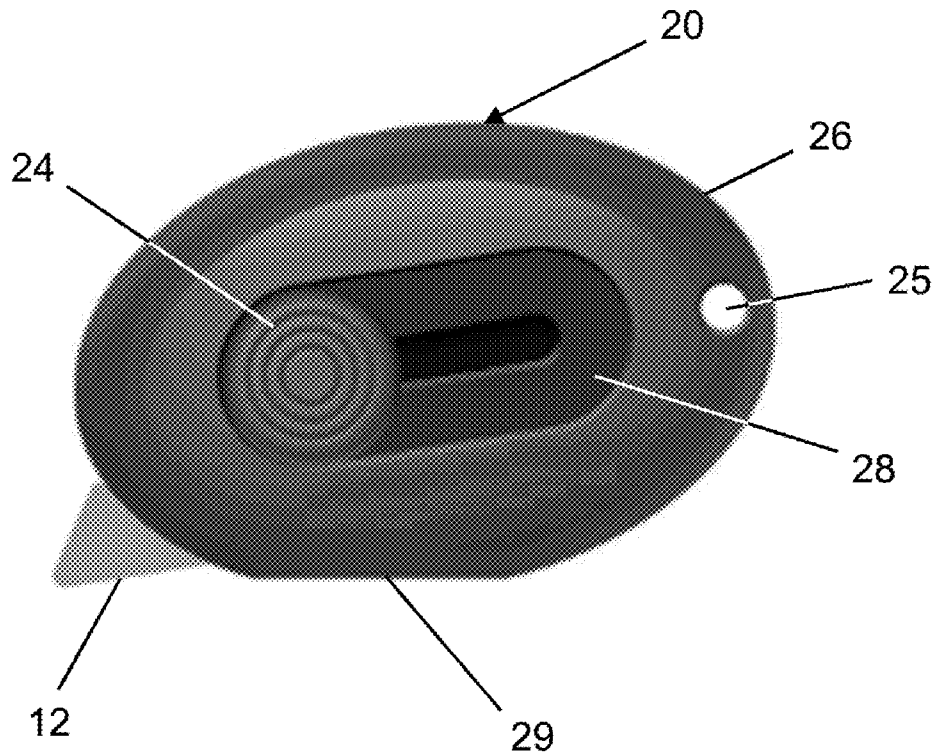
SLICE, Inc.  
By TM [Signature]  
Title FOUNDER : CEO

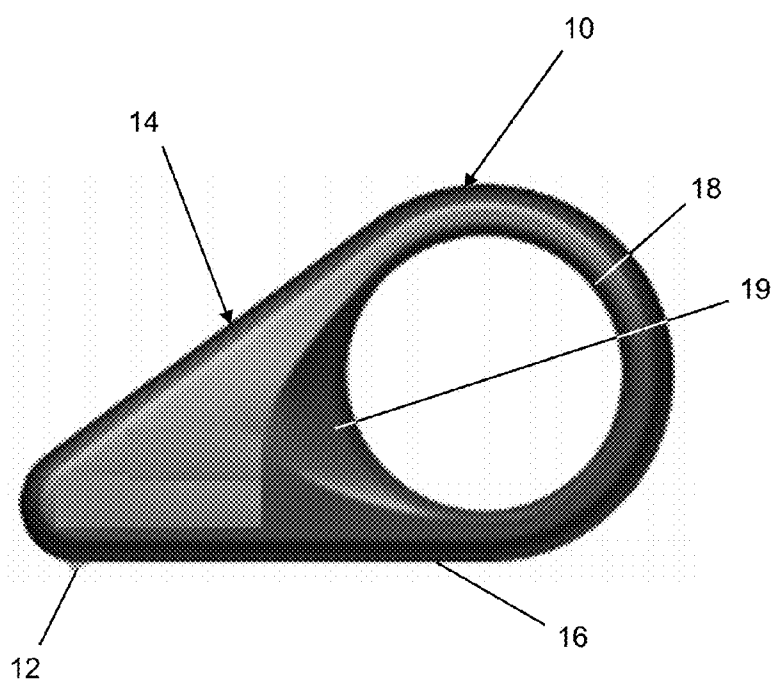
Acme United Corporation  
By CA [Signature]  
Title VP Group leader

# EXHIBIT H

(19) **United States**(12) **Patent Application Publication**  
**Alagno et al.**(10) **Pub. No.: US 2016/0288345 A1**(43) **Pub. Date: Oct. 6, 2016**(54) **COMPACT CUTTER WITH CERAMIC  
BLADE****Publication Classification**(71) Applicant: **Acme United Corporation**, Fairfield,  
CT (US)(72) Inventors: **Christopher J. Alagno**, Oxford, CT  
(US); **Nicholas L. Seferi**, Southbury,  
CT (US)(51) **Int. Cl.**  
**B26B 5/00** (2006.01)**B26B 9/00** (2006.01)(52) **U.S. Cl.**  
CPC ..... **B26B 5/003** (2013.01); **B26B 9/00**  
(2013.01); **B26B 5/005** (2013.01)(21) Appl. No.: **15/088,325**(22) Filed: **Apr. 1, 2016****Related U.S. Application Data**(60) Provisional application No. 62/141,528, filed on Apr.  
1, 2015.(57) **ABSTRACT**

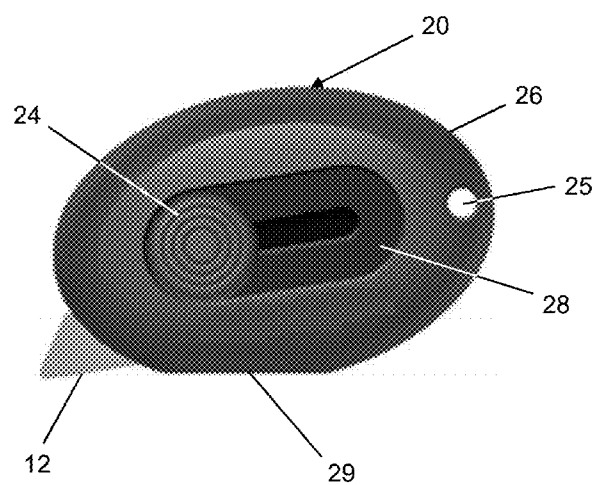
A compact cutter employs a ceramic blade. The ceramic blade may be fixed or retractable and configured to easily cut paper or other thin material without readily cutting or injuring the user. A paper cutter employs a blade that can be easily replaced without the need for auxiliary tools.



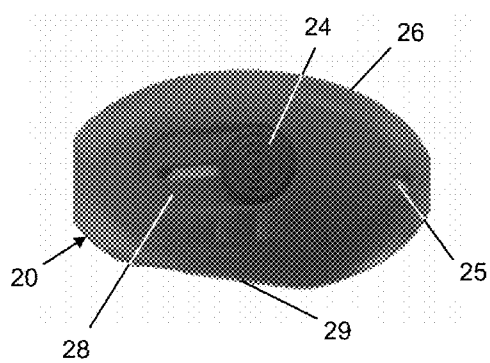


**Fig. 1**

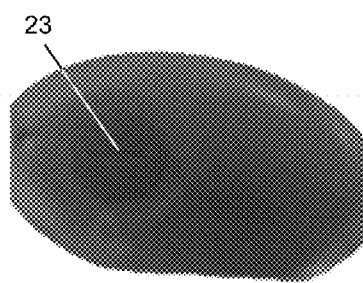




**Fig. 2A**



**Fig. 2B**



**Fig. 2C**

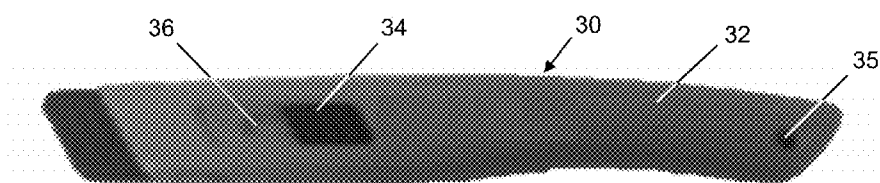
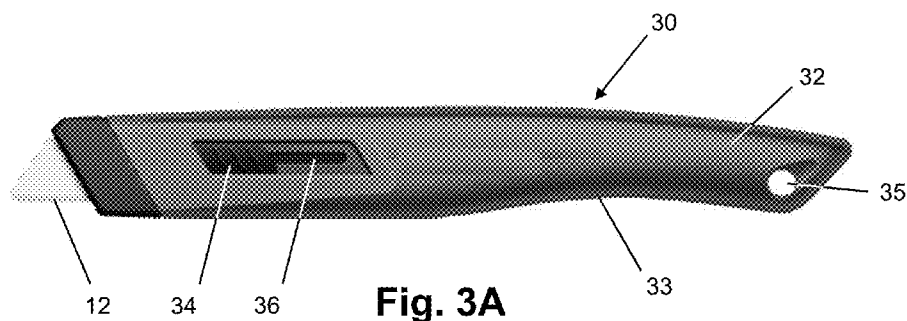
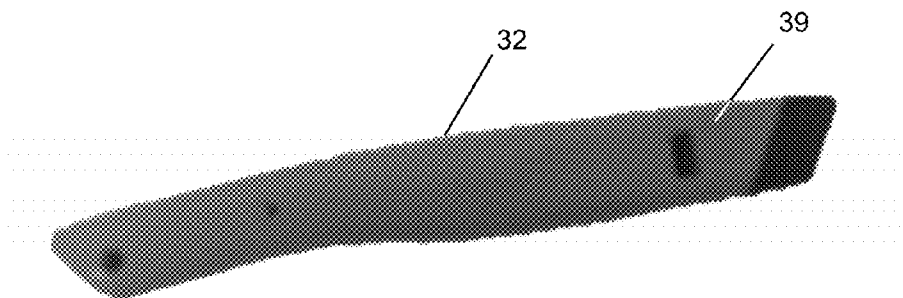


Fig. 3B

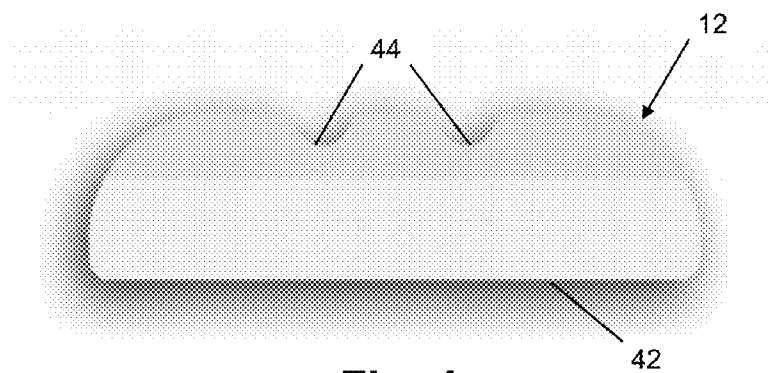


Fig. 3C





**Fig. 3D**



**Fig. 4**

US 2016/0288345 A1

Oct. 6, 2016

1

## COMPACT CUTTER WITH CERAMIC BLADE

### BACKGROUND

[0001] The present disclosure relates generally to utility knives or paper cutters, and more particularly, to portable compact utility cutters.

[0002] Conventional paper cutters are found in numerous forms and dimensions. Many paper cutters are unwieldy and have cutting surfaces dangerous to the end user. It is common for paper cutters or utility knives to use metallic blades designed to have a compact form and which need to be replaced often. These metallic blades can easily cut the skin of the user and are otherwise prone to cause injury. Such blades also wear out or corrode, thereby limiting the usable life of the paper cutter. It would be advantageous to provide a paper cutter that incorporates an alternative blade that is more effective, safer, longer lasting, and easier to replace.

[0003] A compact ceramic cutter comprises a blade fixed within a holder. The holder has a longitudinal guide surface. The blade is made of a ceramic material and protrudes from the longitudinal guide surface. The holder separates into two lateral sections without the need for tools to allow the user to replace the blade.

### SUMMARY

[0004] Briefly stated, one embodiment of the present invention is directed to a paper cutter that uses a fixed or retractable ceramic blade that easily cuts paper or other thin material but does not readily cut or injure the user. One embodiment is also directed to a paper cutter that employs a blade that can be easily replaced without the need for auxiliary tools.

[0005] The holder may further comprise a loop dimensioned to easily and comfortably accommodate the user's finger. In one embodiment, the holder also comprises a button and a slide. The blade protrudes in an extended position from the longitudinal guide surface only when the button is depressed by the user. The blade moves along the slide to the extended position and is biased to automatically return to a retracted position when said button is not depressed by the user. The holder further has a key-ring hole to affix the compact ceramic cutter to a key-ring or a lanyard. The holder further comprises a magnet to affix the compact ceramic cutter to a metallic or magnetic surface.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 is a side view of a one embodiment of a compact ceramic cutter according to aspects of the disclosure;

[0007] FIG. 2A is a side view of an alternate embodiment of a compact ceramic cutter according to aspects of the disclosure;

[0008] FIG. 2B is a side view of the compact ceramic cutter of FIG. 2A in a retracted state;

[0009] FIG. 2C is an opposite side view of the compact ceramic cutter of FIG. 2B;

[0010] FIG. 3A is a side view of an alternate embodiment of a compact ceramic cutter according to aspects of the disclosure;

[0011] FIG. 3B is a side view of the compact ceramic cutter of FIG. 3A in a retracted state;

[0012] FIG. 3C is a top view of the compact ceramic cutter of FIG. 3B;

[0013] FIG. 3D is an opposite side view of the compact ceramic cutter of FIG. 3B; and

[0014] FIG. 4 is a side plan view of a ceramic blade according to aspects of the disclosure.

### DETAILED DESCRIPTION

[0015] Referring to FIG. 1, wherein like numerals indicate like elements, there is shown a representative embodiment of a compact ceramic cutter 10. Ceramic cutter 10 contains a blade 12 fixed within a holder 14. In the depicted embodiment, the blade 12 is embedded in the holder 14 and protrudes a desired amount from a longitudinal guide surface 16. The holder 14 contains a loop 18 dimensioned to easily and comfortably accommodate a user's finger. The holder 14 separates into two lateral sections without the need for tools to allow the end user to replace the blade 12. The blade 12 is depicted in greater detail in FIG. 4.

[0016] In one embodiment, the blade 12 cuts through paper or other thin materials without posing serious danger to the user's skin. The blade 12 is oriented such that the end user pulls the loop 18 with his or her finger along the desired cutting material. Blade 12 follows the longitudinal guide surface 16 as the blade 12 cuts through the paper or other thin material. Longitudinal guide surface 16 is arranged as a cutting guide such that the blade 12 penetrates a consistent depth as the user pulls loop 18 along the material. The blade 12 is oriented and configured such that the cutting surface cuts the material with minimal required force by the end user. The loop 18 is arranged such that the user can easily pull the cutter 10 along the material and push the cutter 10 against the material.

[0017] In the embodiment depicted in FIG. 1, a recess 19 defined in the surface of the holder 14 adjacent the loop 18 provides a comfortable and natural gripping surface for the user's other fingers to provide favorable ergonomic qualities of the ceramic cutter 10. The recess 19 is configured to ease and facilitate cutting operations, particularly when the user desires curved or other complex cutting patterns.

[0018] In the embodiment depicted in FIGS. 2A-2C, ceramic cutter 20 contains a blade 12 which reciprocates within a casing 26. A button 24 moves the blade 12 along a slide 28 between an extended position as depicted in FIG. 2A and a retracted position as depicted in FIG. 2B. The button 24 locks the blade 12 in the retracted position and allows movement of blade 12 to the extended position only when the button 24 is depressed. The blade 12 is biased to automatically return to the retracted position when the user is not depressing the button 24 and holding the blade 12 in the extended position.

[0019] Referring to FIG. 2A, the casing 26 contains a longitudinal guide 29 that assists the user during operation to maintain the blade 12 at a constant depth while cutting. In the depicted embodiment, the casing 26 also contains a key-ring hole 25. Key-ring hole 25 allows the end user to affix the ceramic cutter 20 to a key-ring, lanyard, or the like. Referring to FIG. 2C, the casing 26 contains a magnet 23 to affix the casing 26 to outside metallic or magnetic surfaces. Other embodiments include similar key-ring holes and magnets.

[0020] Referring to FIGS. 3A-3D, a ceramic blade box cutter 30 contains a handle 32 and a button 34. The user depresses the button 34 and moves the button 34 along a

US 2016/0288345 A1

Oct. 6, 2016

2

track 36 to expose a blade 12 from the handle 32 to an extended position as depicted in FIG. 3A. When the user stops exerting a force on the button 34, the blade 12 returns to the retracted state and is protected within the handle 12 as depicted in FIG. 3B. In the depicted embodiment, the handle 32 also contains a key-ring hole 35. Key-ring hole 35 allows the end user to affix the box cutter 30 to a key-ring, lanyard, or the like. Box cutter 30 also contains a grip 33 to provide an ergonomic surface for the user's hand. In one embodiment, the handle 32 is approximately 5.25 to 6.25 inches long and 0.25 to 1 inches tall.

[0021] Referring to FIG. 3C, a tab 38 allows the user to replace the blade 12 without needing auxiliary tools. When the tab 38 is depressed, a collar 39 (depicted in FIGS. 3B and 3C) separates from the handle 32 and the entire blade 12 is exposed. The user may adjust the blade 12 within the handle 32 or replace it with a new blade 12. In one embodiment, when the collar 39 is separated from the handle 32 a blade storage bay (not depicted) is also exposed. The blade storage bay allows storage of spare blades 12 not currently in use.

[0022] Referring to FIG. 4, a blade 12 has a cutting edge 42 and opposed mounting recesses 44. The depicted blade 12 is compatible with all embodiments of the present disclosure. In the depicted embodiment, opposite longitudinal ends of the cutting edge 42 are curved for added safety. The mounting recesses 44 mate with complementary tabs (not depicted) within each ceramic cutter. The depicted blade 12 is symmetrical with dual functional cutting edge portions, allowing the user to reverse the blade to expose and sequentially use both ends of cutting edge 42. This further increases the life of a single blade 12. In one embodiment, the blade 12 is approximately 25 millimeters long and 6.55 millimeters tall.

[0023] While preferred embodiments of the foregoing have been set forth for purposes of illustration, the foregoing description should not be deemed a limitation of the inventions herein. Accordingly, various modifications, adaptations and alternatives may occur to one skilled in the art without departing from the spirit and the scope of the present invention.

1. A compact ceramic cutter comprising:

a blade fixed within a holder, said holder having a longitudinal guide surface, said blade being made of a ceramic material and protruding from said longitudinal guide surface;

wherein said holder separates into two lateral sections without the need for tools to allow a user to replace said blade.

2. The compact ceramic cutter of claim 1, wherein said holder further comprises a loop dimensioned to easily and comfortably accommodate the user's finger.

3. The compact ceramic cutter of claim 1, wherein said holder further comprises a button and a slide;

wherein said blade protrudes in an extended position from said longitudinal guide surface only when said button is depressed by the user, said blade moves along said slide to said extended position and is biased to automatically return to a retracted position when said button is not depressed by the user.

4. The compact ceramic cutter of claim 1, wherein said holder further defines a key-ring hole to affix said compact ceramic cutter to a key-ring or lanyard.

5. The compact ceramic cutter of claim 1, wherein said holder further comprises a magnet to affix said compact ceramic cutter to metallic or magnetic surfaces.

\* \* \* \* \*

# EXHIBIT I



## 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.
15/088,325	04/01/2016	Christopher J. Alagno	ACME/349/US	3320
2543	7590	06/30/2017		
ALIX YALE & RISTAS LLP 750 MAIN STREET SUITE 1400 HARTFORD, CT 06103			EXAMINER LEE, LAURA MICHELLE	
			ART UNIT	PAPER NUMBER
			3724	
			NOTIFICATION DATE	DELIVERY MODE
			06/30/2017	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):

ip@pctlaw.com

**Office Action Summary**Application No.  
15/088,325Applicant(s)  
ALAGNO ET AL.Examiner  
LAURA M. LEEArt Unit  
3724AIA (First Inventor to File)  
Status  
Yes**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/20/2017.  
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ 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.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims\***

- 5) ☒ Claim(s) 1-9 is/are pending in the application.  
5a) Of the above claim(s) 2 and 5 is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1, 3-4, 6-9 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, 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](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 4/01/2016 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

**Priority under 35 U.S.C. § 119**

- 12) ☐ 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)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 3) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 4) ☐ Other: \_\_\_\_\_.

Application/Control Number: 15/088,325  
Art Unit: 3724

Page 2

### **DETAILED ACTION**

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

### ***Election/Restrictions***

2. Claims 2 and 5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/20/2017

3. Applicant's election without traverse of Group III, Fig, 3A in the reply filed on 6/20/2017 is acknowledged.

### ***Drawings***

4. Color photographs and color drawings are not accepted in utility applications unless a petition filed under 37 CFR 1.84(a)(2) is granted. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), one set of color drawings or color photographs, as appropriate, if submitted via EFS-Web or three sets of color drawings or color photographs, as appropriate, if not submitted via EFS-Web, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

Application/Control Number: 15/088,325  
Art Unit: 3724

Page 3

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings and black and white photographs have been satisfied. See 37 CFR 1.84(b)(2). The drawings are in greyscale and are cannot be clearly reproducible.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of 35 U.S.C. 112(b):  
(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-9 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 1 recites, “a blade fixed within a holder.” In several of the embodiments, the blade does not appear to be fixed, or non-moving, as it moves along the various tracks in figures 2a and 3a.

***Claim Rejections - 35 USC § 102***



Application/Control Number: 15/088,325

Page 4

Art Unit: 3724

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

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

8. Claim(s) 1, 3, 5-9 is/are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Scimone et al. (U.S. Patent 5,979,057), herein referred to as Scimone.

In regards to claim 1, Scimone discloses a compact ceramic cutter comprising a blade (106) fixed within a holder (108/109), said holder having a longitudinal guide surface, said blade being made of a ceramic material (paragraph [0060]) and protruding from said longitudinal guide surface; wherein said holder separates into two lateral sections (fig. 7) without the need for tools (via 110 and 111) to allow a user to replace said blade.

In regards to claim 3, Scimone discloses wherein said holder further comprises a button (130) and a slide (103); wherein said blade protrudes in an extended position from said longitudinal guide surface only when said button is depressed by the user, said blade moves along said slide to said extended position and is biased to automatically return to a retracted position when said button is not depressed by the user (paragraph [0057]).

Application/Control Number: 15/088,325  
Art Unit: 3724

Page 5

***Claim Rejections - 35 USC § 103***

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

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is/are rejected under 35 U.S.C. 103 as being unpatentable over Scimone et al. (U.S. Patent 5,979,057), herein referred to as Scimone in view of Hsu (U.S. Patent 6,374,496).

In regards to claim 4, Scimone discloses the claimed invention except wherein said holder further defines a key-ring hole to affix said compact ceramic cutter to a key-ring or lanyard. Attention is directed to the Hsu reference which discloses another sliding utilizing knife wherein the back of the handle is provided a hole to allow for the attachment of a key ring or lanyard, etc. It similarly would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the Scimone blade to have a hole as taught by Hsu for a similar mounting purpose.

11. Claim 6 is/are rejected under 35 U.S.C. 103 as being unpatentable over Scimone et al. (U.S. Patent 5,979,057), herein referred to as Scimone in view of Green (U.S. Publication 2007/0101576).

In regards to claim 6, Scimone discloses wherein said blade has a cutting edge and a mounting recess (fig. 11) but not opposed mounting recesses. However, attention is directed to the Green utility blade that discloses the use of variously shaped

Application/Control Number: 15/088,325

Page 6

Art Unit: 3724

utility knife blade corners (figs. 1-5) in combination with a dual recessed (30) cutting blade. As Scimone already discloses the use of a singular recesses, and plural recesses are known, it would have been obvious to one having ordinary skill in the art to have modified the Scimone blade to have two recesses rather than one as an obvious modification that provides a double engagement feature over a singular engagement.

12. Claims 7-8 is/are rejected under 35 U.S.C. 103 as being unpatentable over Scimone et al. (U.S. Patent 5,979,057), herein referred to as Scimone in view of Muccino et al. (U.S. Patent D636,646).

In regards to claim 7-8, Scimone discloses wherein said blade has opposite longitudinal ends, and one of said ends is curved, but does not disclose that the other end is curved. Attention is further directed to the Muccino utility blade. Muccino discloses that it is known to curve both ends of the utility knife rather than just one end, so that the blade has a protected end, regardless of what end is protruding from the blade. It similarly would have been obvious to one having ordinary skill in the art to have modified the Scimone blade to have two rounded ends rather than a singular rounded end as shown by Muccino.

13. Claim 9 is/are rejected under 35 U.S.C. 103 as being unpatentable over Scimone et al. (U.S. Patent 5,979,057), herein referred to as Scimone. In regards to claim 9, Scimone discloses the claimed invention except wherein said blade has a longitudinal length of approximately 25mm and a transverse width of approximately 6.55mm. It

Application/Control Number: 15/088,325

Page 7

Art Unit: 3724

would have been an obvious matter of design choice to have made the blade length and width as needed to the user and as pertinent to the design, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Especially as no other dimensions are claimed, the dimensions of the blade are just a scaling up or down of the blade as shown by Scimone. It would have been obvious to one having ordinary skill in the art to have designed the size of the blade and knife to be as needed for the intended use and cutting operation.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 5,979,057; 8,857,064; 20050193566; 6233830; 8,375,588; 6,163,963; D788554; D623911; 9,662,796

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an

Application/Control Number: 15/088,325

Page 8

Art Unit: 3724

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, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LAURA M LEE/

Primary Examiner, Art Unit 3724