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(54) **APPLICATORS FOR ADHESIVE TAPE, SUCH AS DOUBLE-SIDED ADHESIVE TAPE**

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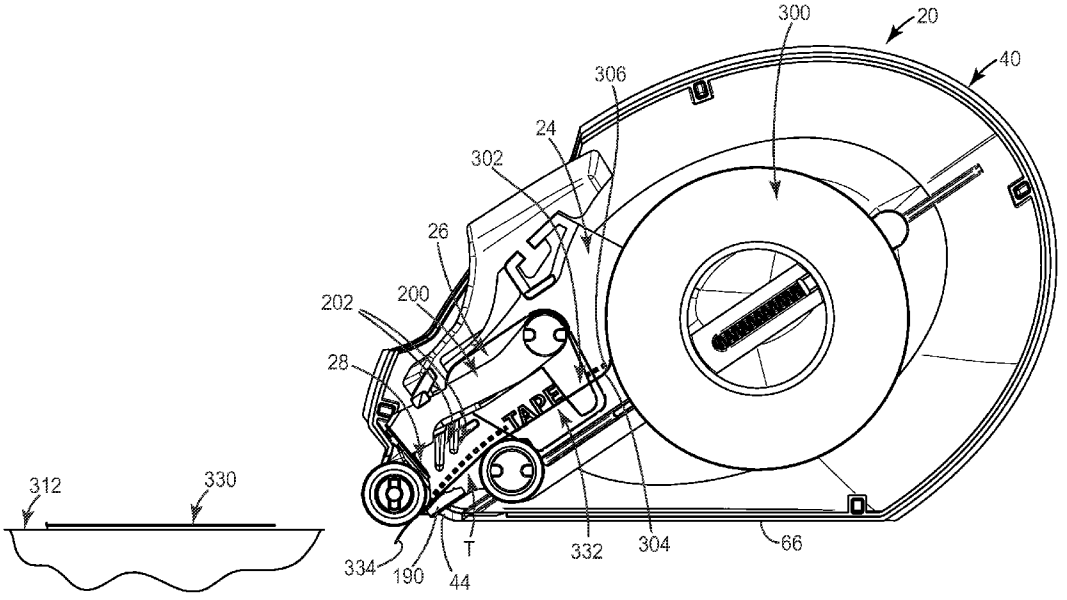
CPC ***B65H 35/0033*** (2013.01); ***B65H 35/0086*** (2013.01)

(57) **ABSTRACT**

A tape applicator (**20**) including housing, carriage, and blade assemblies (**22**;**24**;**26**). The housing assembly (**22**) includes a housing (**40**) and an application roller (**42**). The carriage assembly (**24**) includes a carriage body (**120**), a hub (**122**), and an idler roller (**124**). The carriage body (**120**) and hub (**122**) are slidably mounted within the housing (**40**). The idler roller (**124**) is rotatably mounted to the carriage body (**120**). The blade assembly (**26**) includes a blade arm (**200**), a blade (**28**), and a pressing finger (**202**). The blade arm (**200**) pivots relative to the housing (**40**) about a pivot axis. The blade (**28**) projects from the blade arm (**200**) to a tip. An articulation plane is defined by the blade tip and the pivot axis. The pressing finger (**202**) projects from the blade arm (**200**) through the articulation plane. The applicator (**20**) is transitionable between an application state and a cut state to sever tape (**302**) along an internal tape path. The pressing finger (**202**) flexes to prevent the tape (**302**) from adhering to the blade (**28**) during the cutting operation.



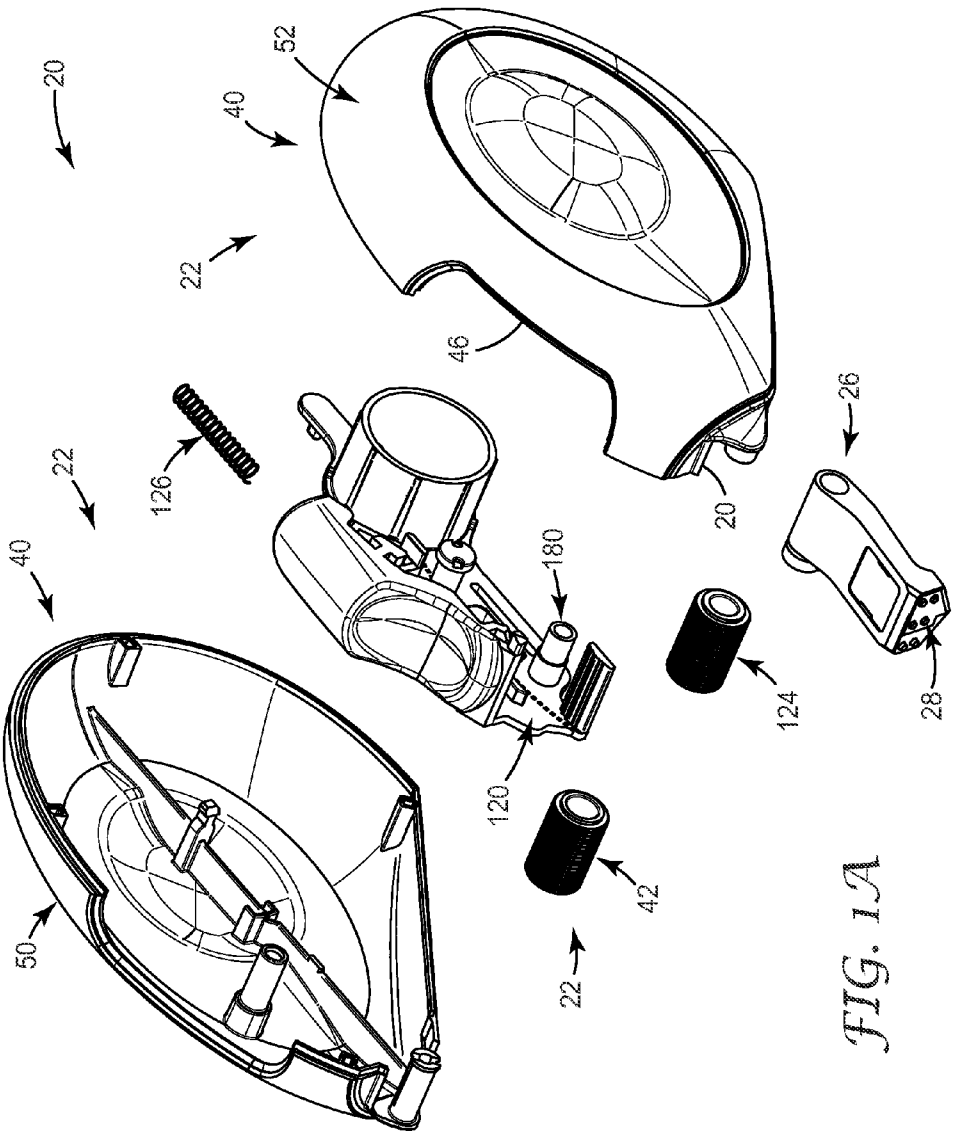


FIG. 1A

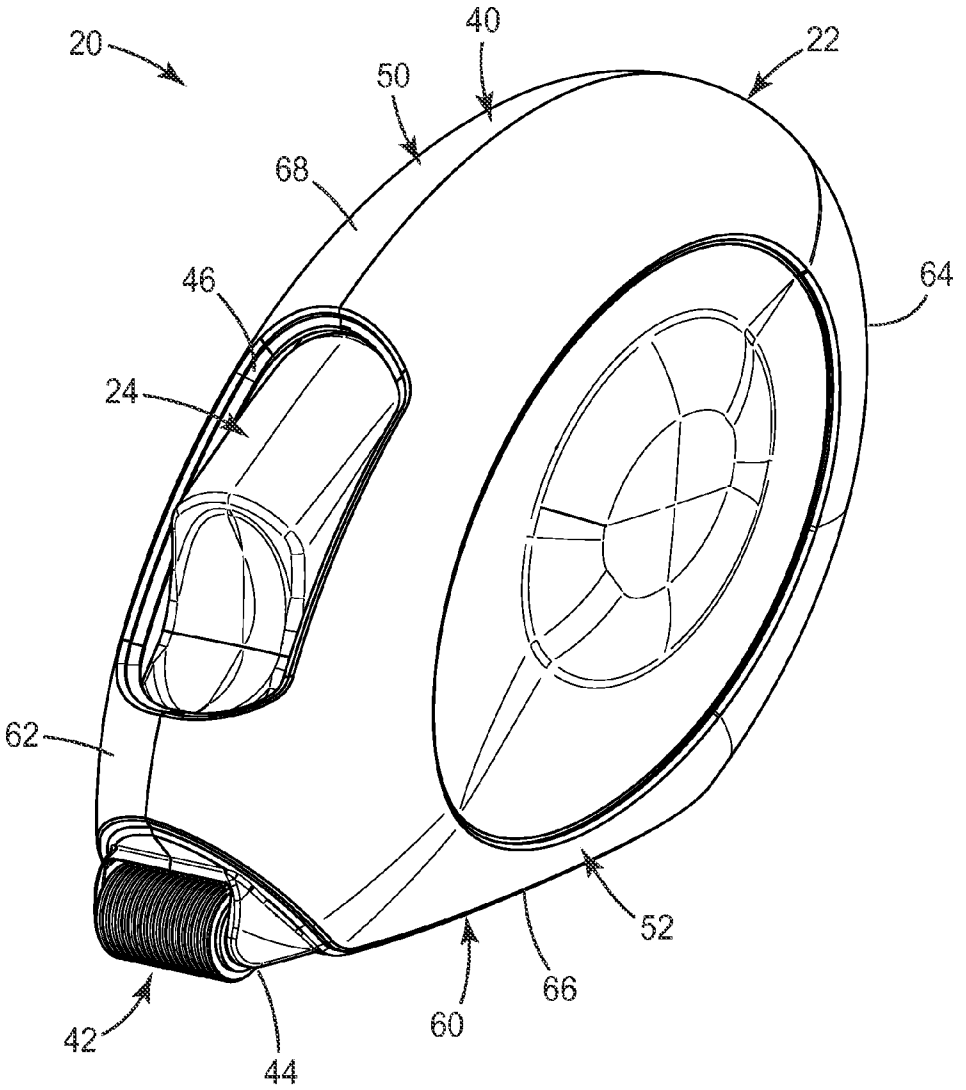


FIG. 1B

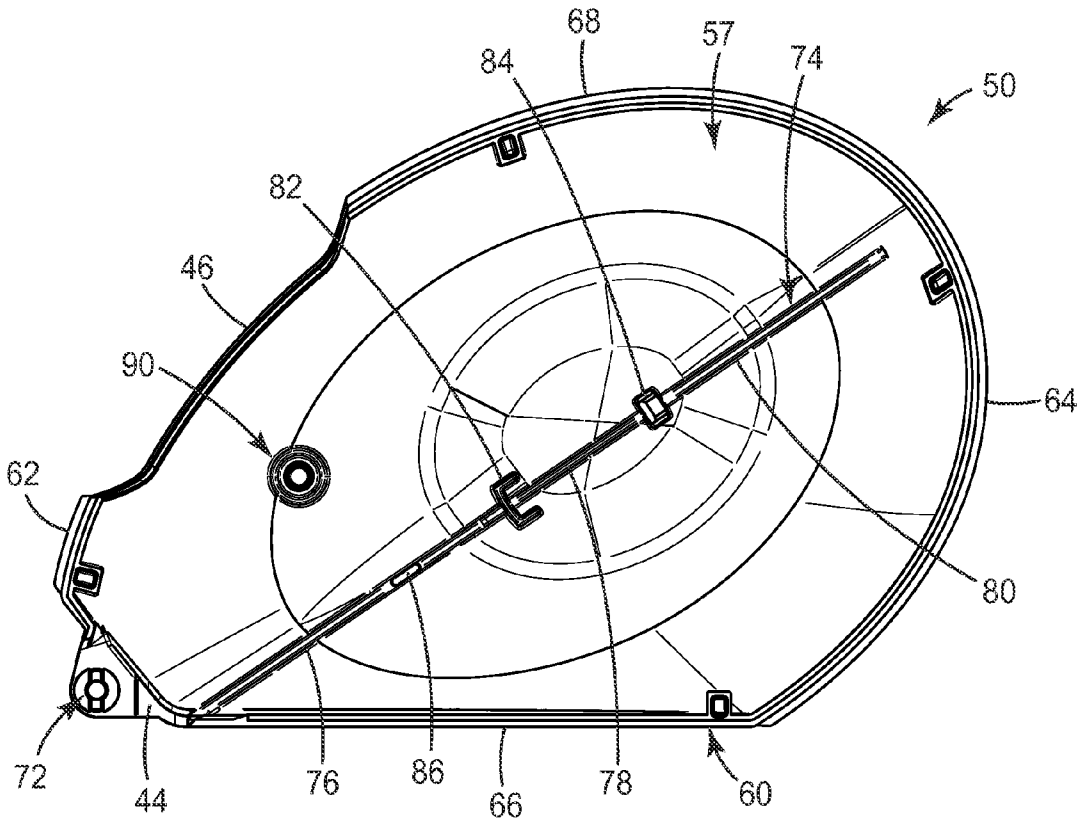


FIG. 2

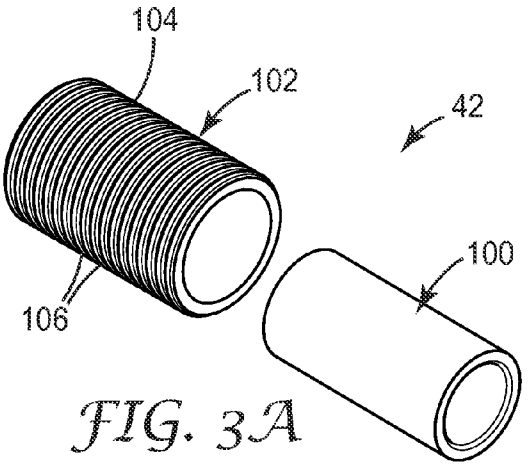


FIG. 3A

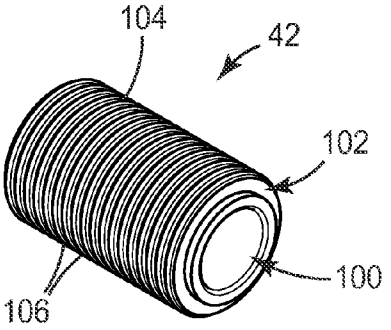


FIG. 3B

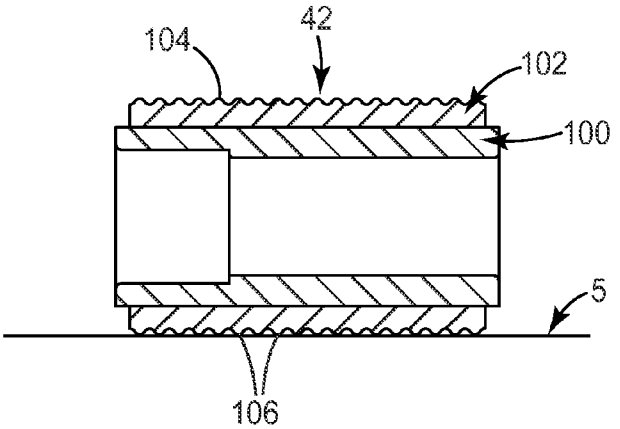
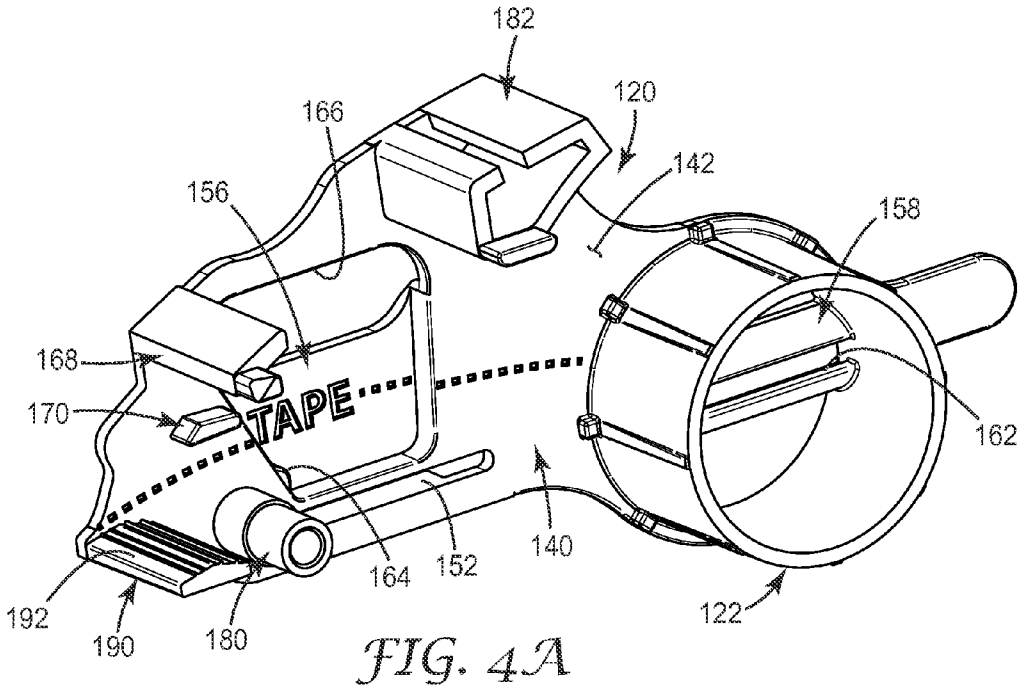


FIG. 3C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TAPE
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122

FIG. 4A

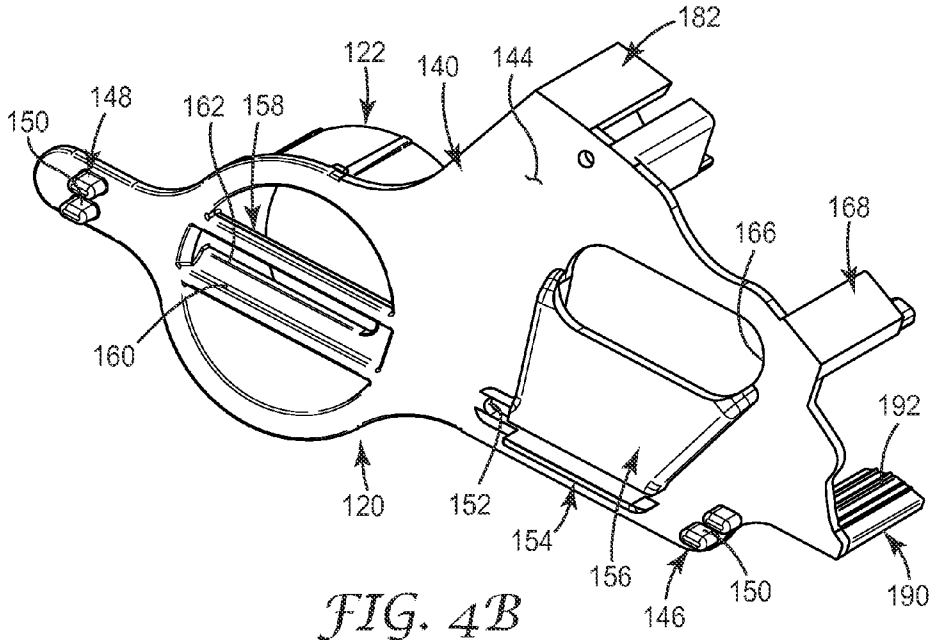
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FIG. 4B

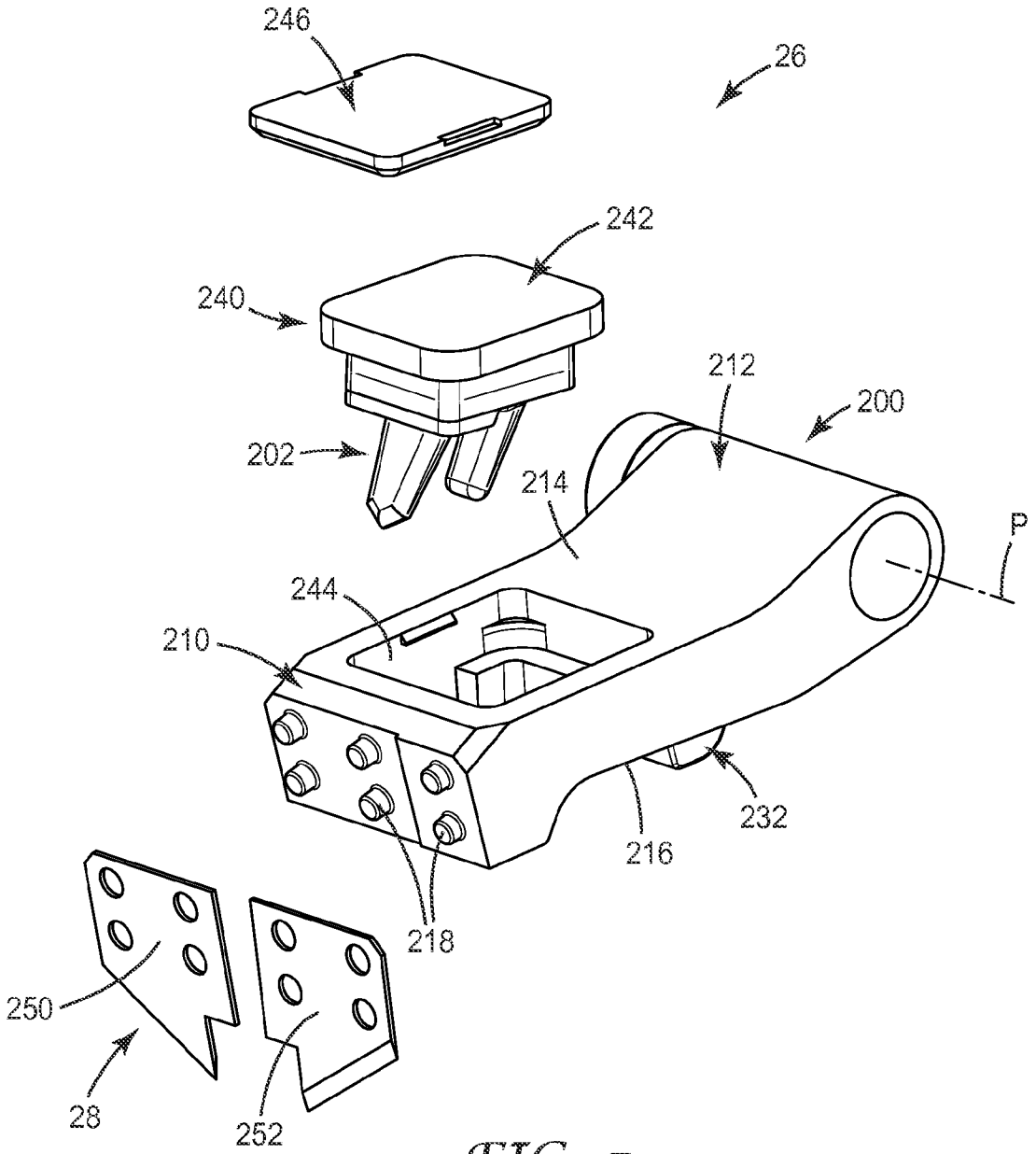


FIG. 5

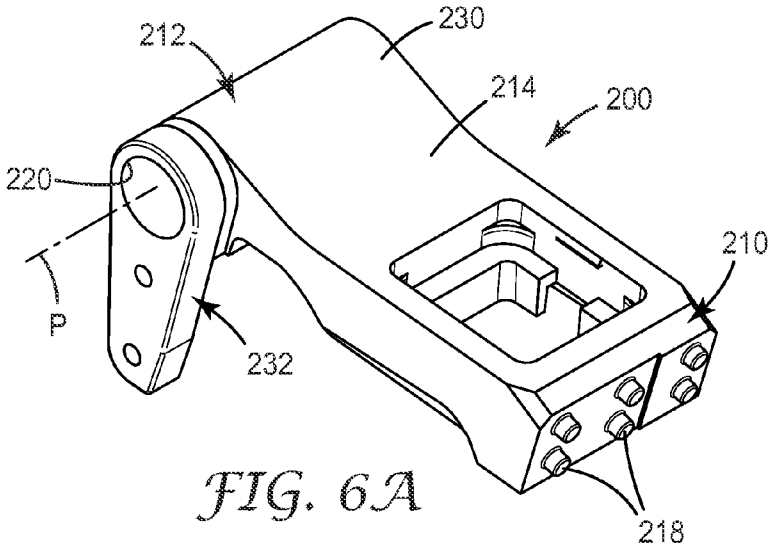


FIG. 6A

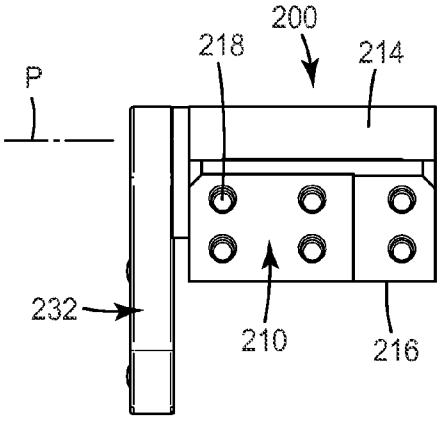


FIG. 6B

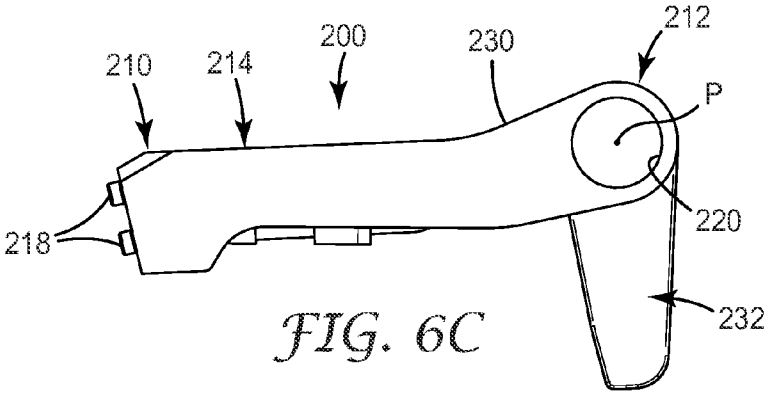


FIG. 6C

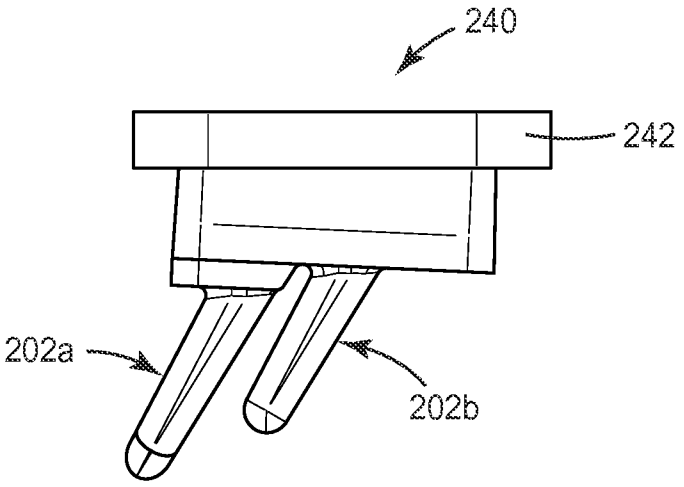


FIG. 7A

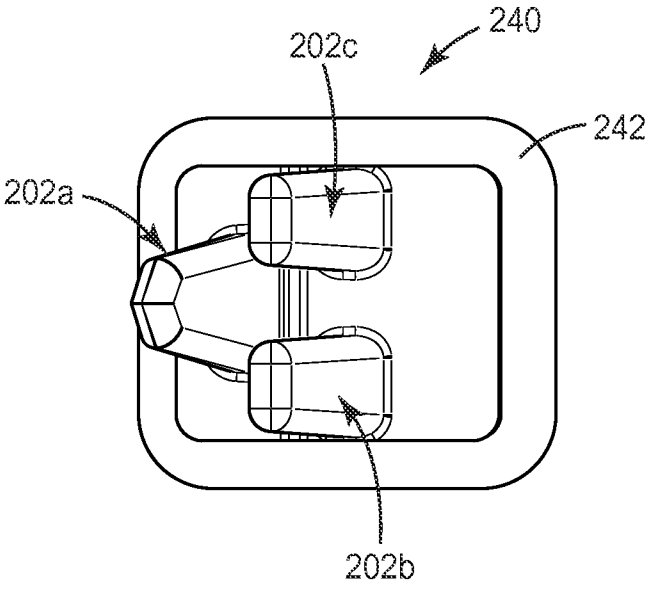
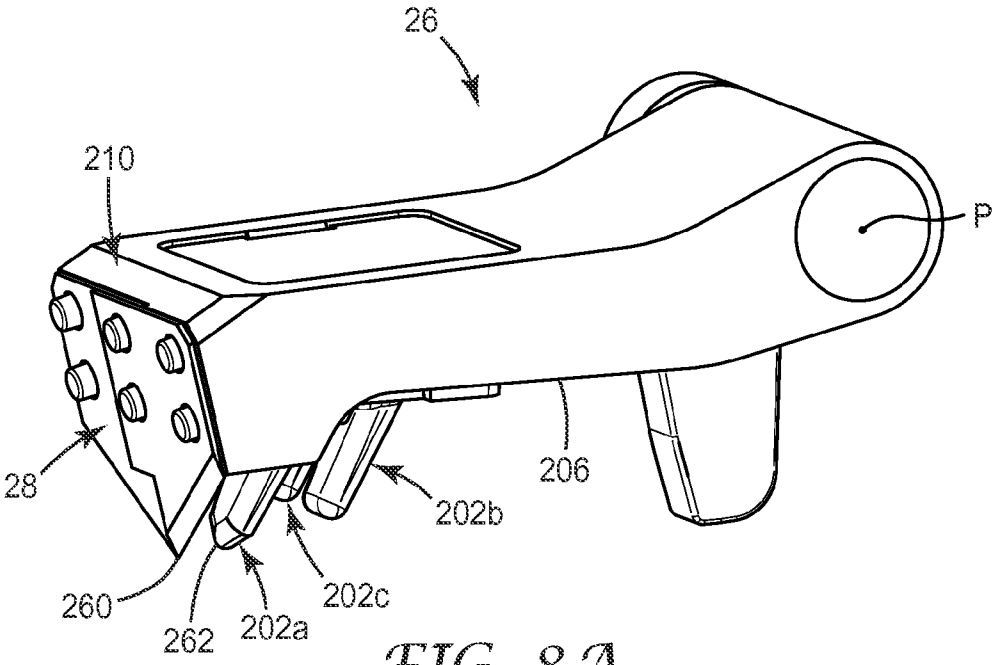


FIG. 7B


26
210
P
28
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202b
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202a
202c

FIG. 8A

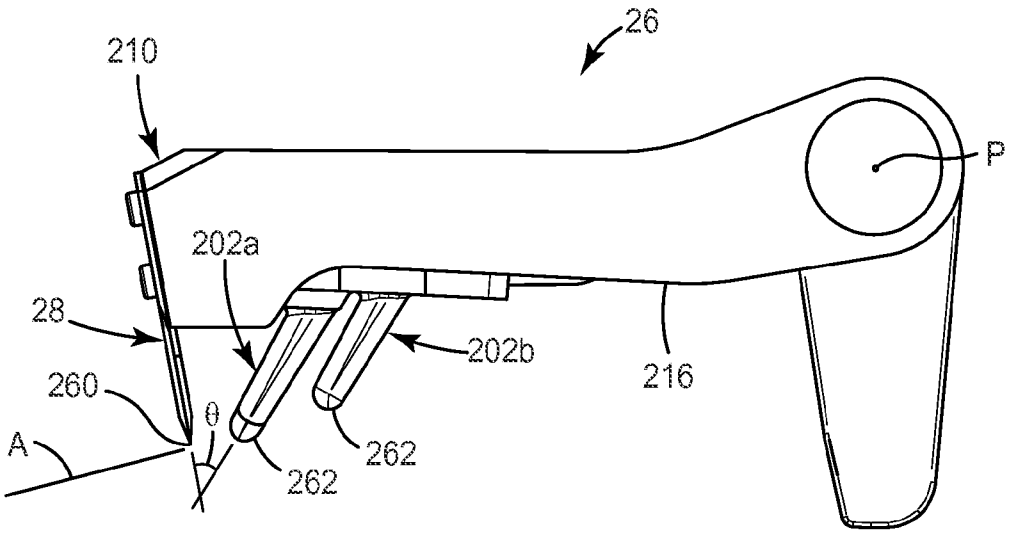
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FIG. 8B

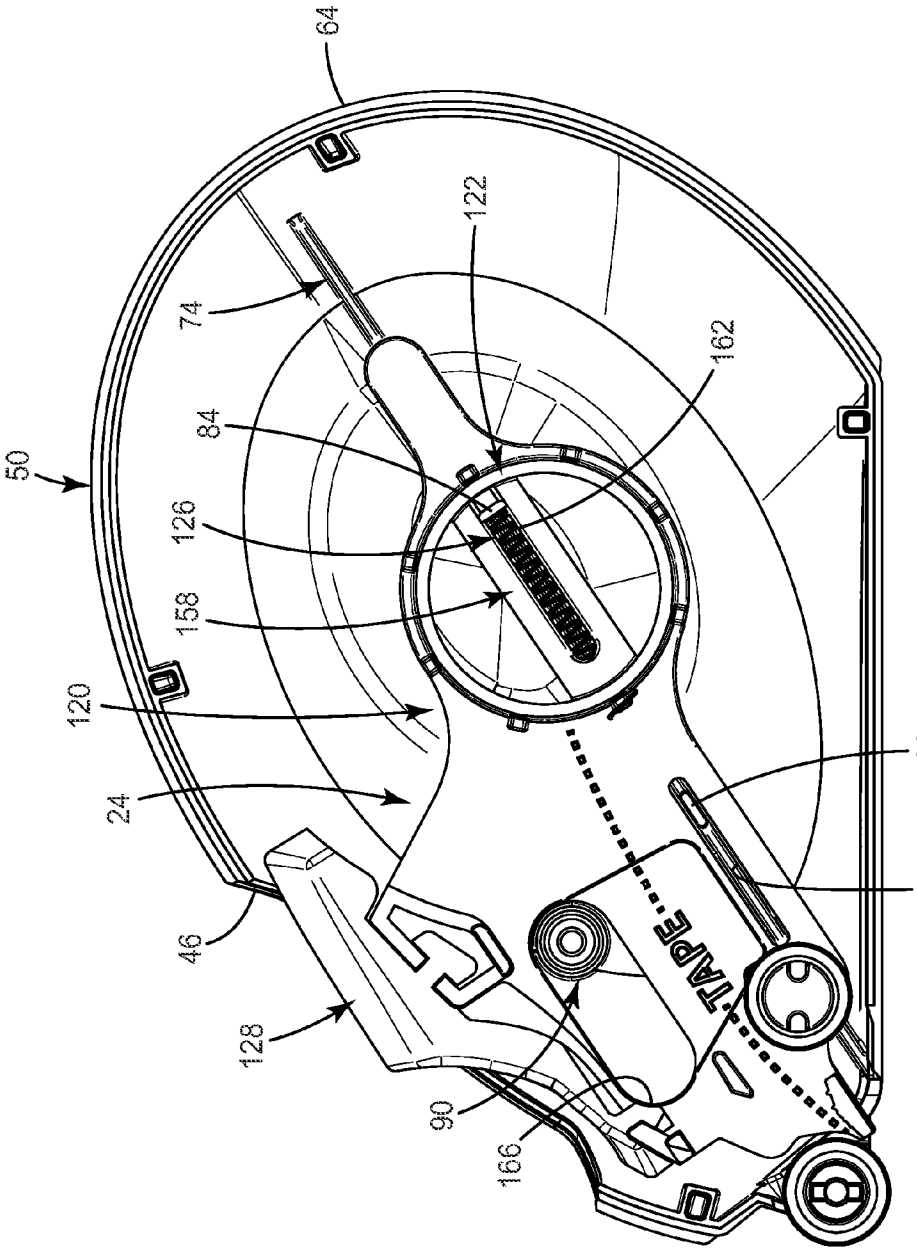


FIG. 9A

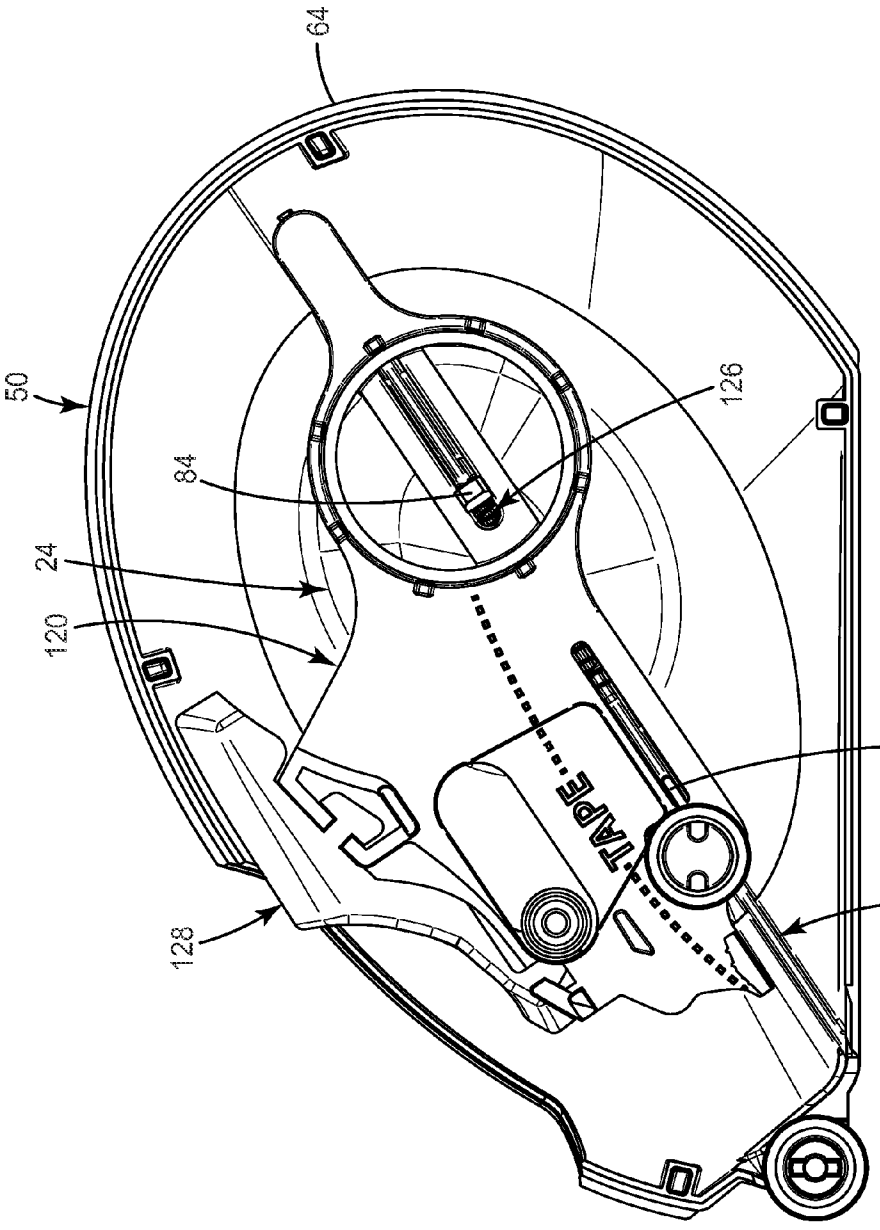
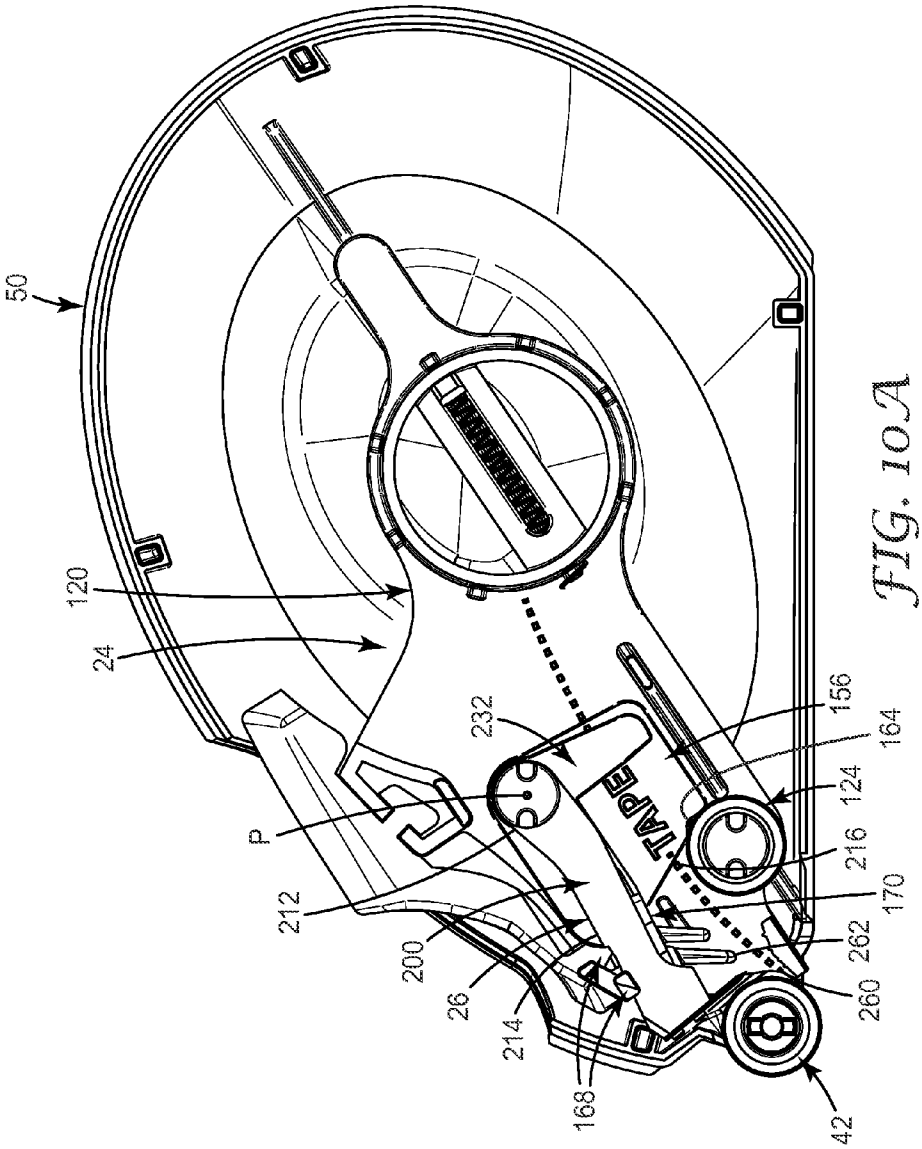


FIG. 9B


50
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P
TAPE

FIG. 10A

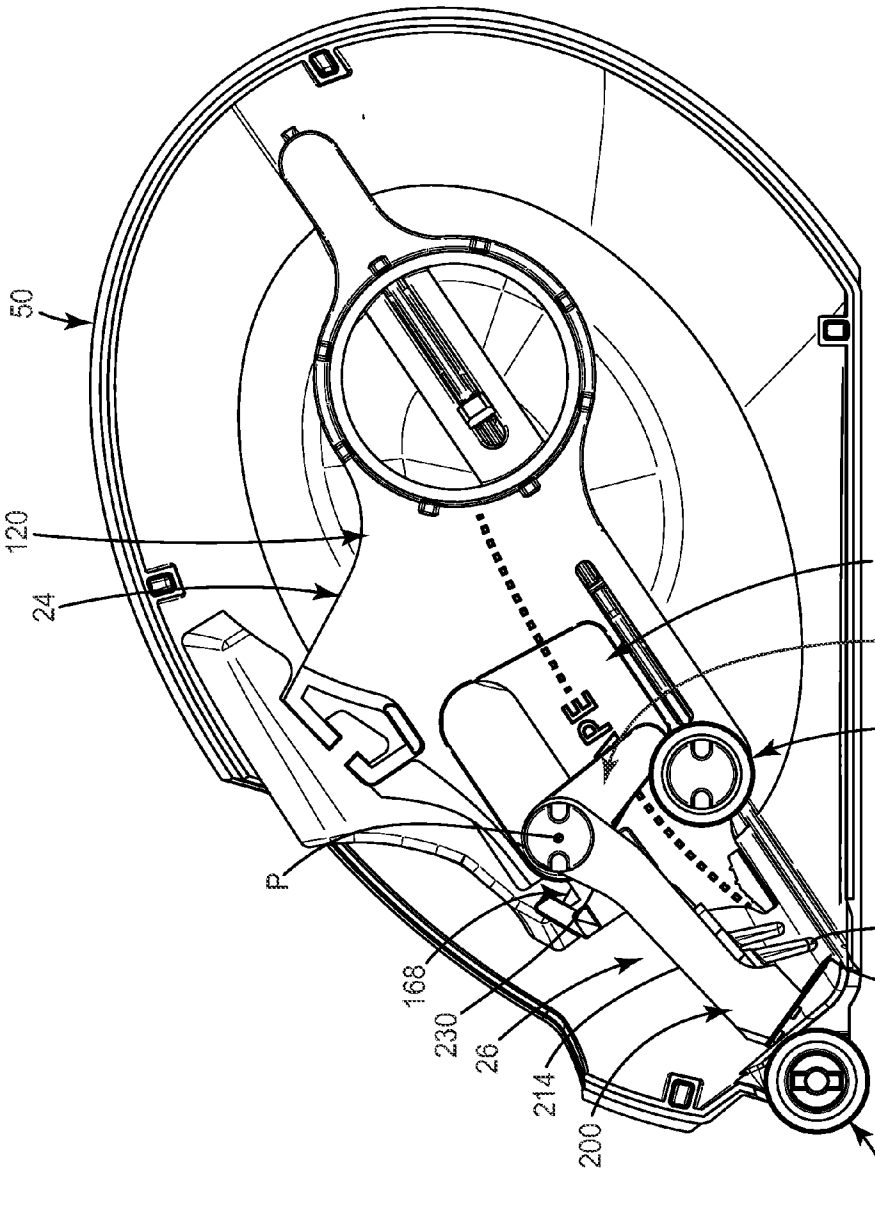

FIG. 10B

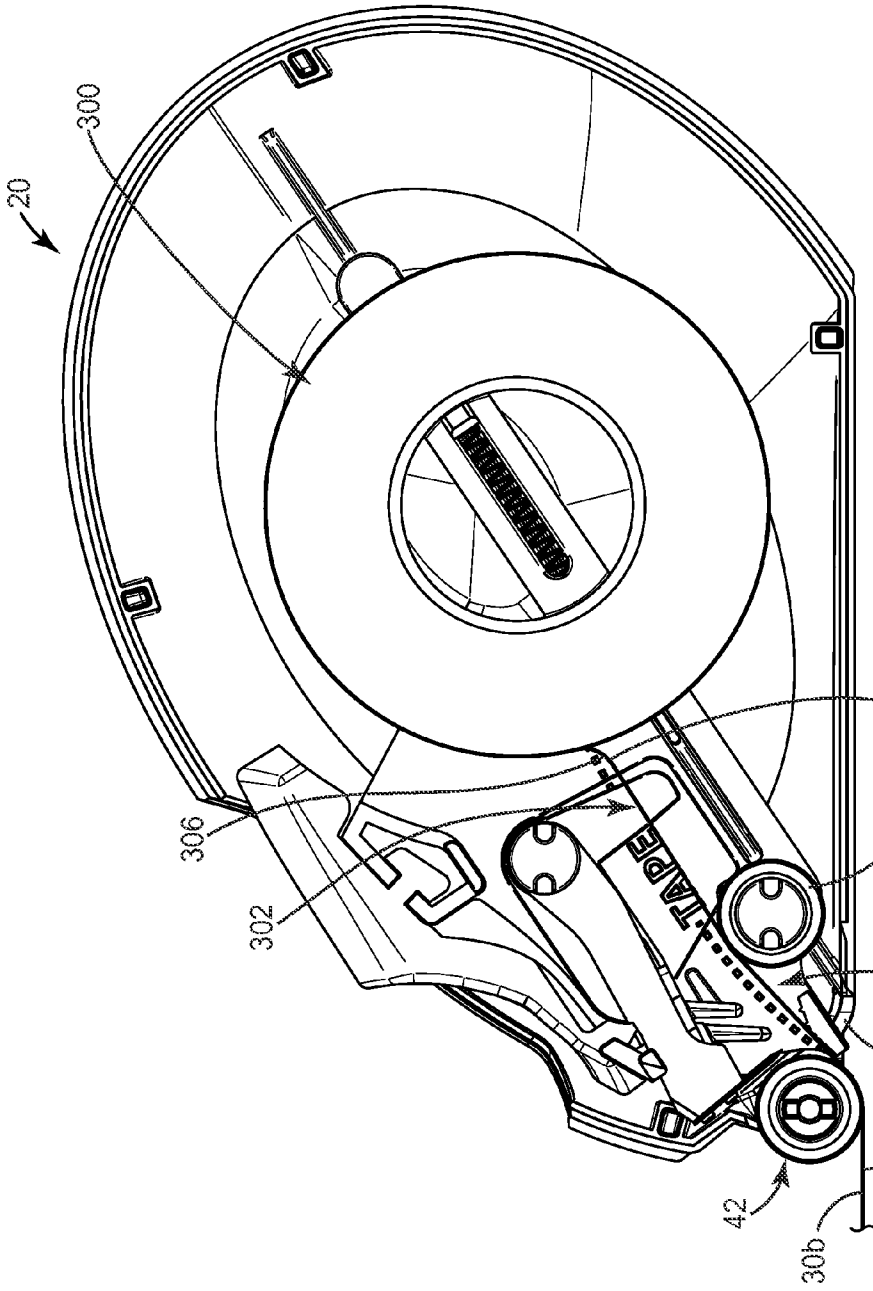

FIG. 11A

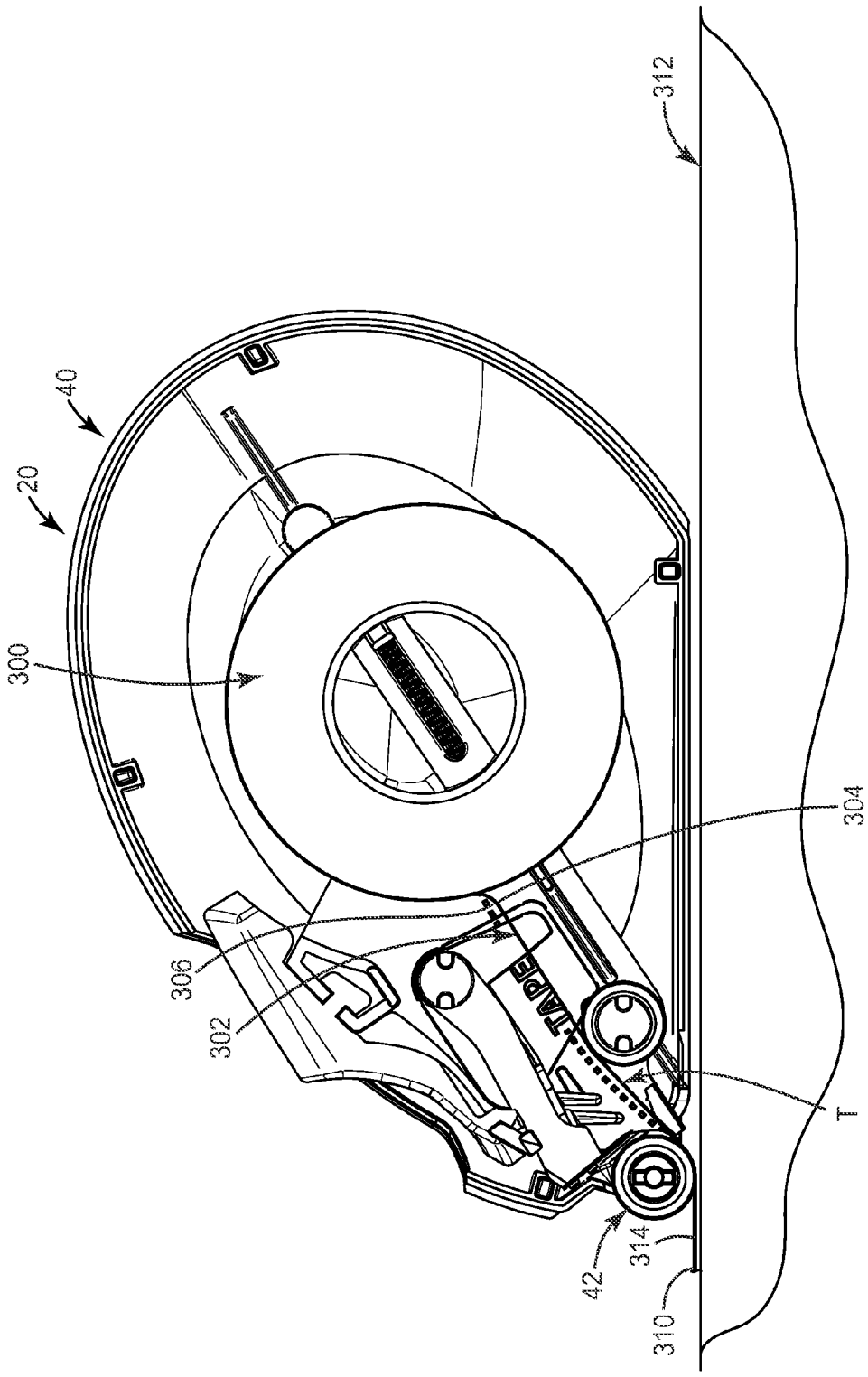

FIG. 11B

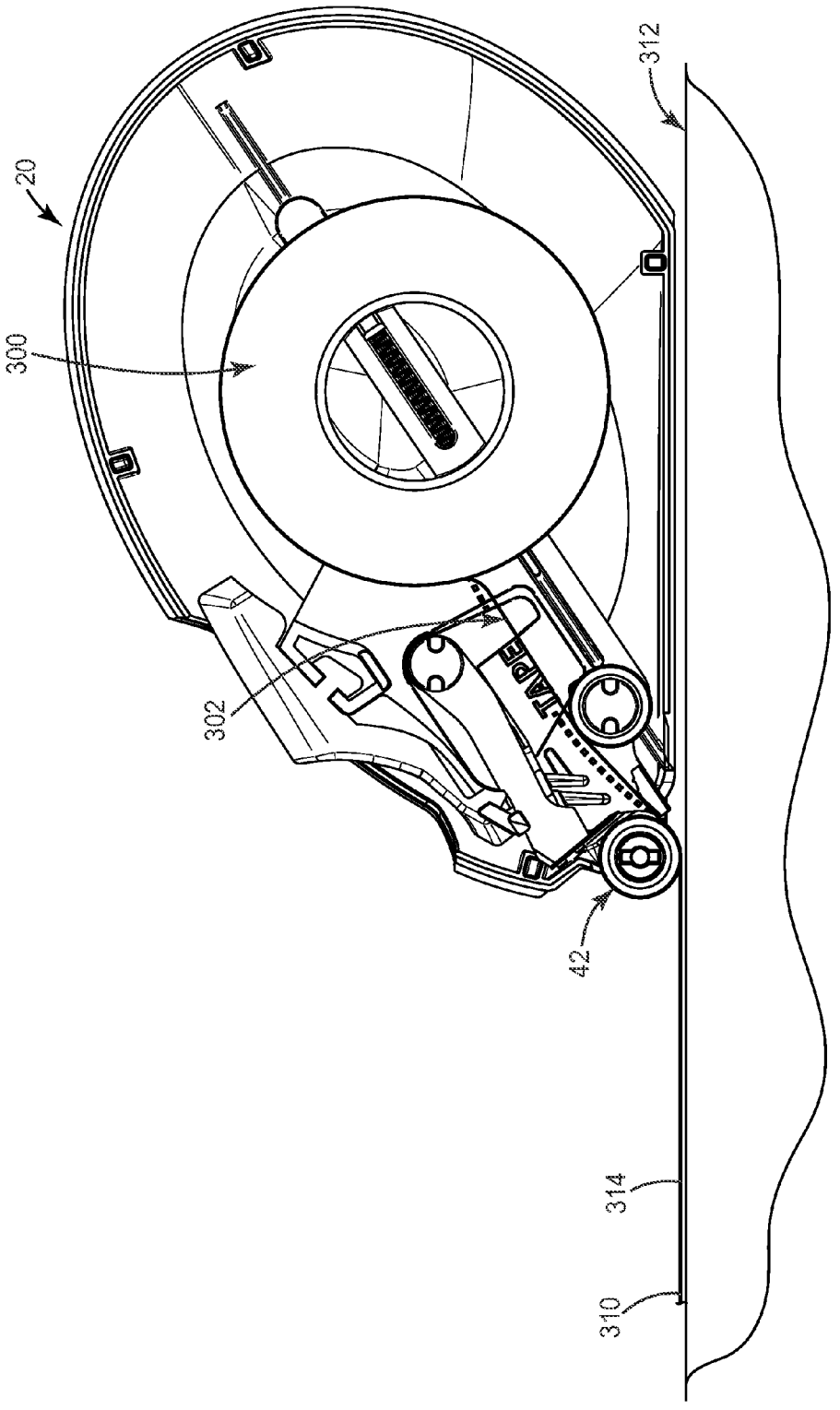

FIG. 11C

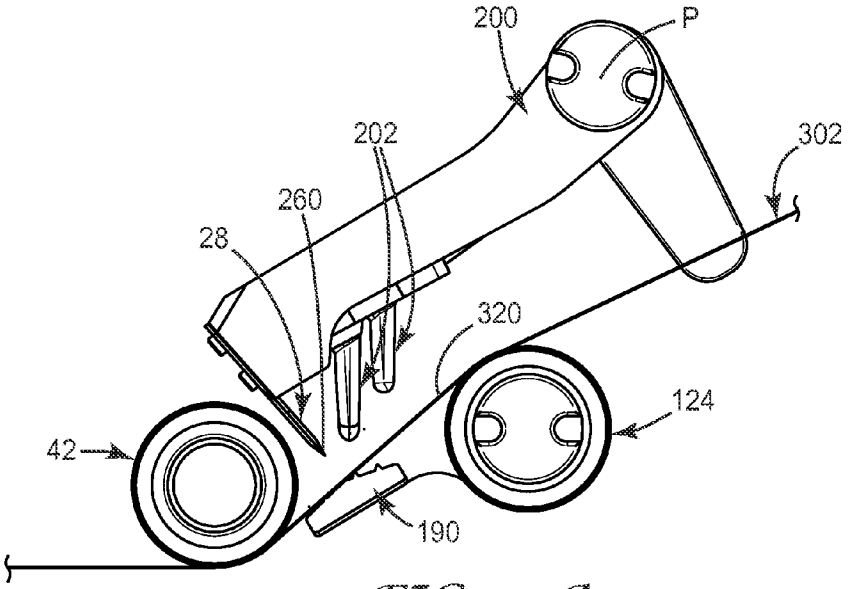

FIG. 12A

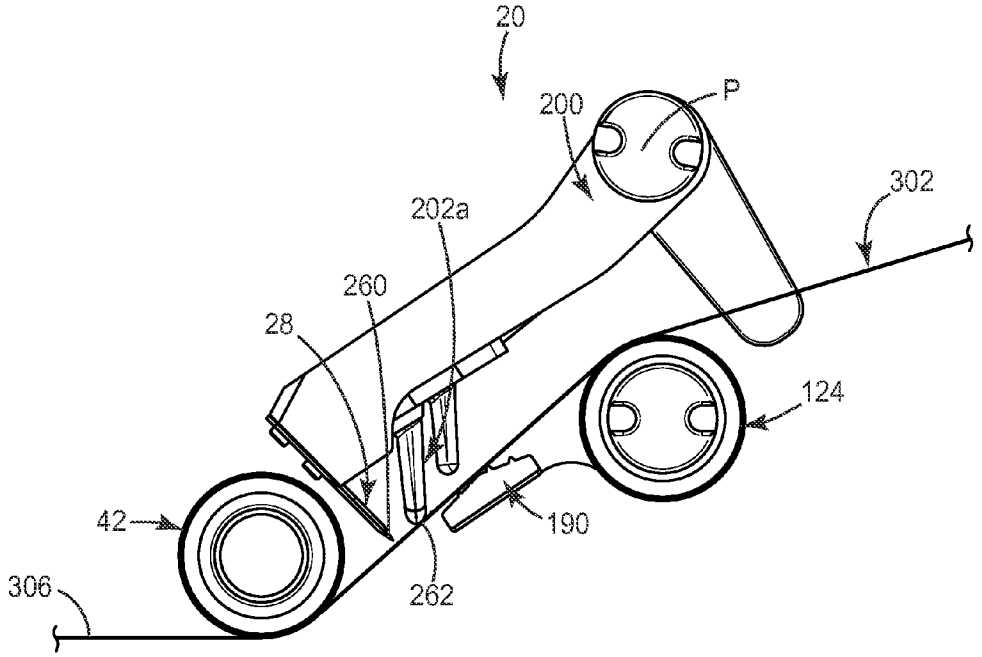

FIG. 12B

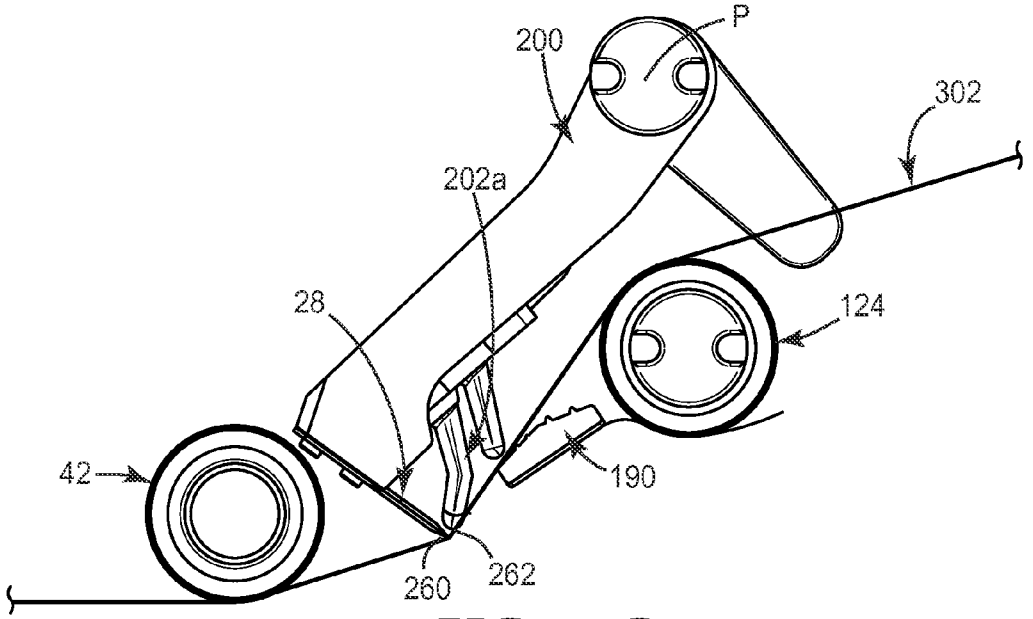

FIG. 12C

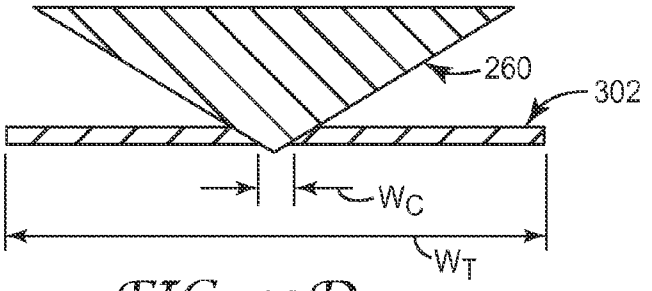

FIG. 12D

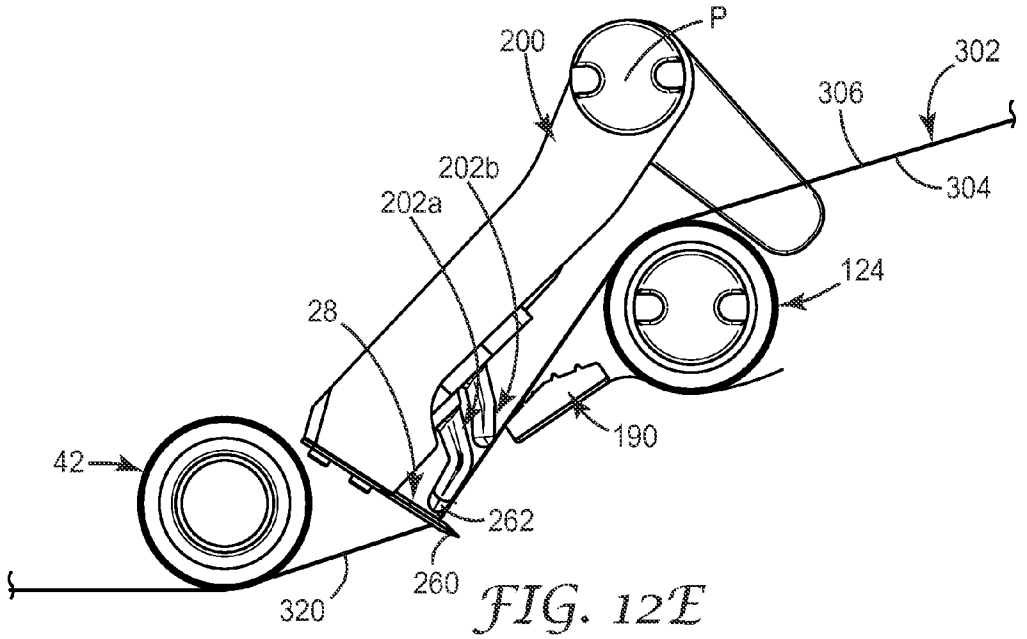

FIG. 12E

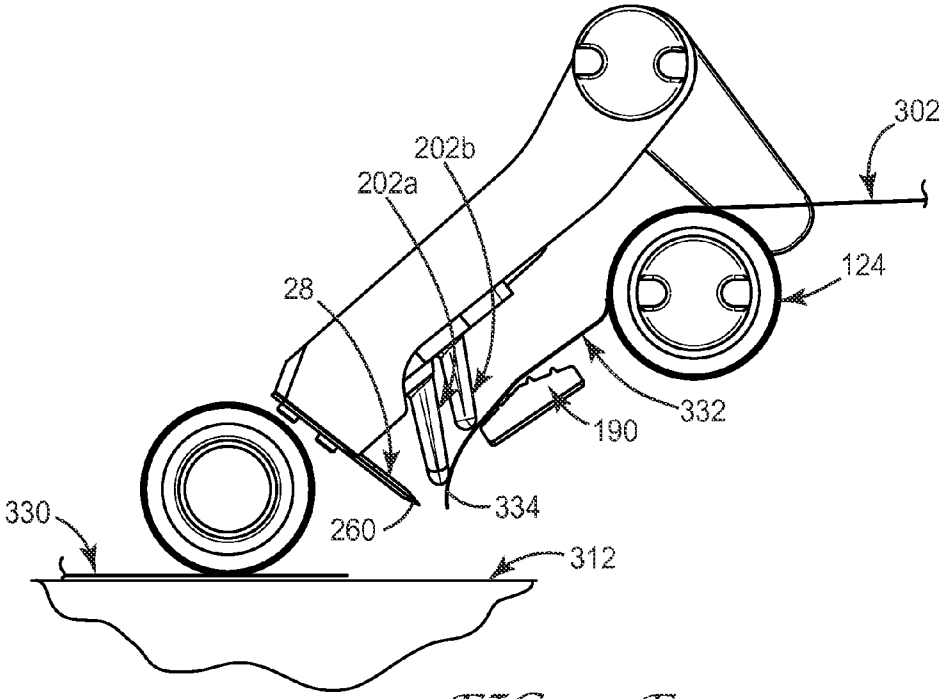

FIG. 12F

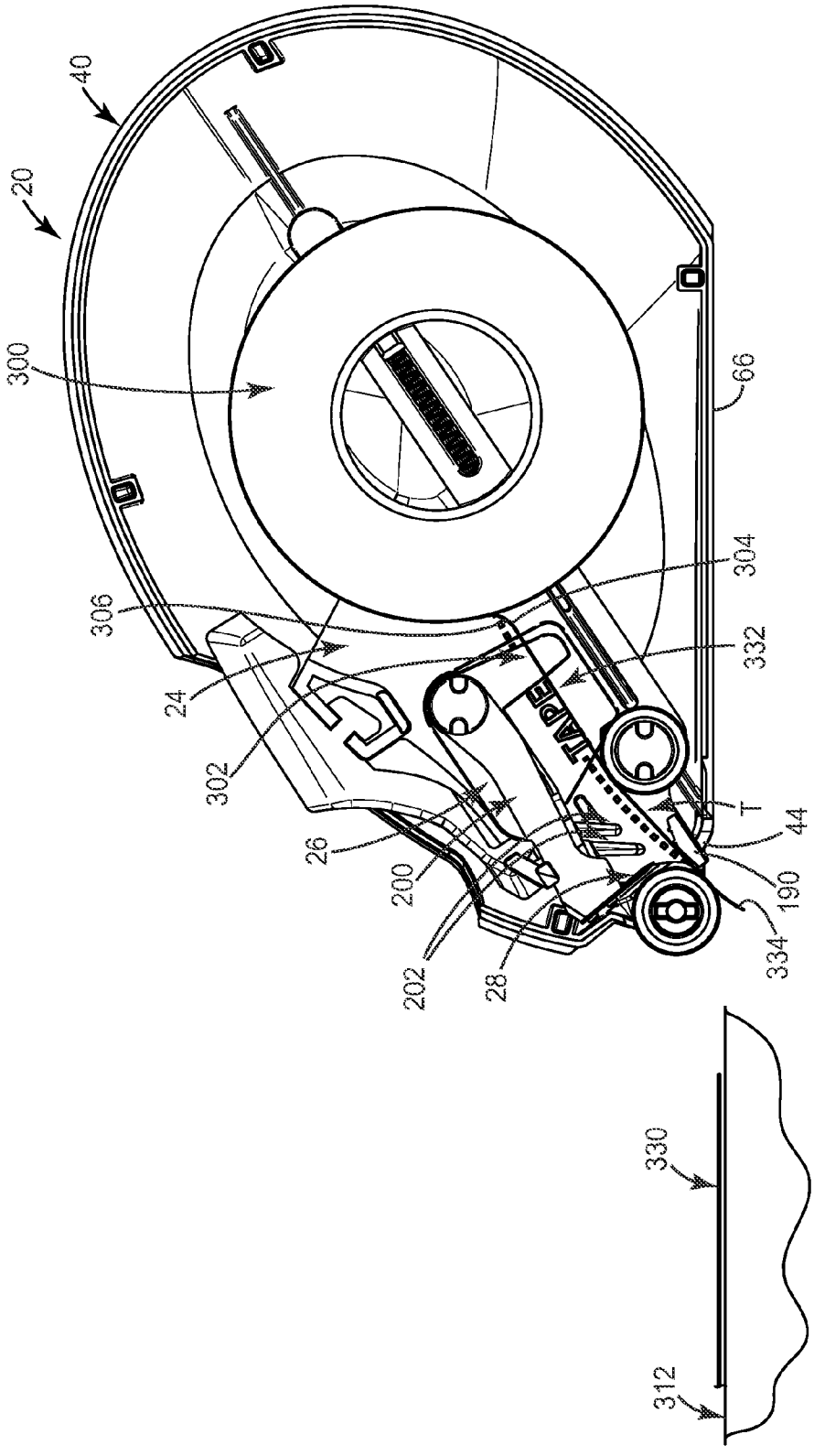

FIG. 12G

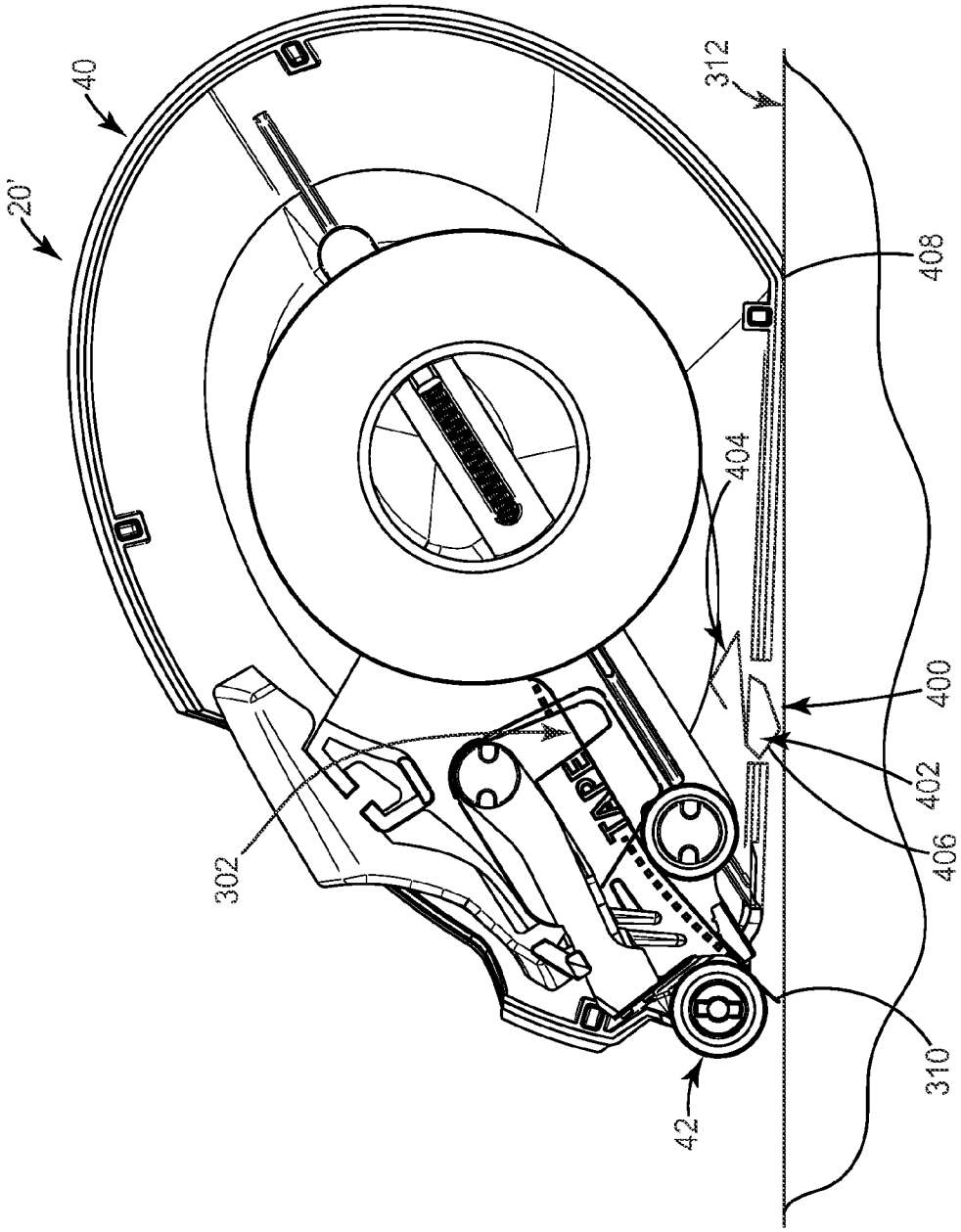

FIG. 13

APPLICATORS FOR ADHESIVE TAPE, SUCH AS DOUBLE-SIDED ADHESIVE TAPE

BACKGROUND

[0001] The present disclosure relates to adhesive tape applicators. More particularly, it relates to adhesive tape applicators capable of dispensing and cutting double-sided adhesive tape with one hand operation.

[0002] Manually operated adhesive tape dispensers are available in a variety of forms. For example, desktop-type adhesive tape dispensers typically include a weighted base maintaining a tape roll on a revolving spindle. A user pulls a leading end of the tape away from the roll, and then cuts a desired length of tape at a stationary blade provided with the dispenser. Common handheld adhesive tape dispensers employ a similar format. In either case, use of the dispenser requires two hands to handle the cut length of tape and apply it to the substrate surface(s) in question. Moreover, handheld tape dispensers require both of the user's hands to grasp the dispenser and pull/cut the desired length of tape.

[0003] As an alternative to tape dispensers, manually operated adhesive tape applicators are designed to directly apply and cut a length of tape (from a roll of tape) and often times require only a single hand of the user. In general terms, with single-handed adhesive tape applicators, a user can quickly and precisely apply a desired length of the adhesive tape to the substrate surface(s) in question without ever having to touch the tape. Conventionally, the applicator rotatably maintains a roll of tape, and provides a tape path ending at a roller or other curved application surface; the user applies pressure to this component as the tape is dispensed, ensuring immediate and complete wetting or adhesive engagement with the substrate surface. Further, most single-handed adhesive tape applicators provide a blade or other cutting surface for severing the tape. Consistent with the single-handed operation goal, a user-actuated mechanism is associated with the blade, allowing the user to cut a dispensed length of tape at a desired length by simple manipulation of the cutting mechanism using the same hand that is otherwise handling the applicator. In some instances, the mechanism maneuvers the tape relative to a stationary blade. More commonly, however, the mechanism translates the blade into and out of the tape path.

[0004] While single-handed adhesive tape applicators (incorporating a cutting mechanism) have been well received, certain concerns exist. For example, many users desire the ability to replace an expended roll of tape with a new roll of tape. To meet this demand, the applicator must allow for the partial disassembly thereof (e.g., temporary removal of one or more outer housing sections to access the roll of tape) in a manner that leaves the various internal components (e.g., the cutting mechanism) intact. This requirement, in turn, places distinct design constraints on the cutting mechanism construction, dictating a minimal number of components and complexity. Consistently cutting an adhesive tape via a relatively simple hand-actuated cutting mechanism can be exceedingly difficult under circumstances due to direct contact with the adhesive-bearing surface of the tape. The adhesive has a tendency to partially adhere to the blade. If this tendency is not accounted for, the cut end of the tape may undesirably stick to the blade following a cutting operation, causing the tape to accumulate (or "jam") behind the blade (and/or other applicator malfunctions). Dispensing and cutting double-sided adhesive tape (i.e., adhesive coatings on both sides or major surfaces of the base film) is even more problematic. In fact, most available adhesive tape applicators simply cannot function with double-sided adhesive tape.

[0005] In light of the above, a need exists for adhesive tape applicators that can be operated with one hand, and incorporate a cutting mechanism that consistently cuts, without jamming, any format of adhesive tape, including double-sided adhesive tape.

SUMMARY

[0006] Some aspects of the present disclosure relate to an adhesive tape applicator including a housing assembly, a carriage assembly, and a blade assembly. The housing assembly includes a housing and an application roller. The housing defines a tape dispensing opening. The application roller is rotatably mounted to the housing adjacent the tape dispensing opening. The carriage assembly includes a carriage body, a hub, and an idler roller. The carriage body is slidably mounted within the housing. The hub is carried by the carriage body and is configured to rotatably support a roll of tape. The idler roller is rotatably mounted to the carriage body. The blade assembly includes a blade arm, a blade, and a pressing finger. The blade arm defines a pivot end that is pivotably mounted to the housing such that the blade arm is pivotable relative to the housing about a pivot axis. The blade projects from the blade arm opposite the pivot end and terminates in a blade tip. In this regard, an articulation plane of the blade assembly is defined by the blade tip and the pivot axis. The pressing finger projects from the blade arm at a location between the blade and the pivot end, and extends through the articulation plane. Upon final assembly, the adhesive tape applicator defines a tape path from the hub to the tape dispensing opening, the tape path being defined, at least in part, by the application and idler rollers. With this construction, the adhesive tape applicator is configured to be transitionable between an application state and a cut state. In the application state, the blade tip is at a first side of the tape path. In the cut state, the blade tip is located at a second side of the tape path opposite the first side.

[0007] In some embodiments, the pressing finger interfaces with a length of tape along the tape path during a cutting operation, serving to push or position the cut end of the tape below the blade tip and prevent jamming In related embodiments, the pressing finger is flexible (e.g., formed of silicone or similar material), and deflects when brought into contact with a tape otherwise tensioned across the tape path. In other embodiments, one or both of the application and idler rollers are configured to exhibit a low surface energy or affinity to "sticking" to a pressure sensitive adhesive (or other adhesive format commonly employed with adhesive tapes). For example, the outer surface of one or both of the application roller and the idler roller can be silicone and/or include a series of spaced apart, circumferential ribs. With these constructions, the adhesive tape applicator consistently applies and cuts a desired length of adhesive tape from a tape roll, including double-sided adhesive tape.

[0008] Other aspects of the present disclosure relate to a system for applying adhesive tape. The system includes a roll of adhesive tape and an applicator. The applicator includes a housing assembly, a carriage assembly, and a blade assembly. The housing assembly includes a housing and an application roller. The housing defines a tape dispensing opening. The application roller is rotatably mounted to the housing adjacent the tape dispensing opening. The carriage assembly includes a carriage body, a hub, and an idler roller. The carriage body is slidably mounted within the housing. The hub is

carried by the carriage body and rotatably maintains the roll of adhesive tape. The idler roller is rotatably mounted to the carriage body. The blade assembly includes a blade arm, a blade, and a pressing finger. The blade arm defines a pivot end that is pivotably mounted to the housing such that the blade arm is pivotable relative to the housing about a pivot axis. The blade projects from the blade arm opposite the pivot end and terminates in a blade tip. The pressing finger projects from the blade arm at a location between the blade and the pivot end, and terminates at a contact end opposite the blade arm. Upon final assembly, the system is configured to provide an application state in which a length of tape extends from the roll of tape to the idler roller and then to the application roller for dispensement through the tape dispensing opening. In the application state, the blade and the pressing finger are displaced from the length of tape. Further, the system is transitionable from the application state to a cut state in which the blade tip has progressed through the length of tape to sever the length of tape. In this regard, transitioning of the system from the application state to the cut state includes the contact end contacting the length of tape and then deflecting toward the blade. In some embodiments, the adhesive tape of the roll of adhesive tape is a double-sided adhesive tape.

[0009] Yet other aspects of the present disclosure relate to a method of dispensing an adhesive tape. The method includes receiving a system including an applicator maintaining a roll of adhesive tape. The applicator includes a housing assembly, a carriage assembly, and a blade assembly. The housing assembly includes a housing and an application roller. The housing defines a tape dispensing opening. The application roller is rotatably mounted to the housing adjacent the tape dispensing opening. The carriage assembly includes a carriage body, a hub, and an idler roller. The carriage body is slidably mounted within the housing. The hub is carried by the carriage body and rotatably maintains the roll of adhesive tape. The idler roller is rotatably mounted to the carriage body. The blade assembly includes a blade arm, a blade, and a pressing finger. The blade arm defines a pivot end that is pivotably mounted to the housing such that the blade arm is pivotable relative to the housing about a pivot axis. The blade projects from the blade arm opposite the pivot end and terminates in a blade tip. The pressing finger projects from the blade arm at a location between the blade and the pivot end, and terminates at a contact end opposite the blade arm. In an application state of the system, a leading segment of a length of tape from the roll of tape extends through the dispensing opening and is supported by the application roller. With the system in the application state, the leading segment is pressed into adhesive contact with a substrate surface to define a tacked region. The applicator is manipulated to draw the applicator away from the tacked region while simultaneously maintaining a pressing force on the application roller to successively dispense and apply an additional segment of the length of tape from the applicator and into adhesive contact with the substrate surface. The carriage assembly is actuated to pivot the blade arm, including the pressing finger and the blade contacting the length of tape between the application and idler rollers to completely sever the length of tape. In this regard, due to a tensioned rigidity of the length of tape, prior to the blade completely severing the length of tape, the pressing finger contacts the length of tape and deforms with further pivoting movement of the blade arm. In some embodiments, the adhesive tape of the roll of adhesive tape is a double-sided adhesive tape.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. **1**A is an exploded, perspective view of an adhesive tape applicator in accordance with principles of the present disclosure;

[0011] FIG. **1**B is a perspective view of the adhesive tape applicator of FIG. **1**A upon final assembly;

[0012] FIG. **2** is an interior plan view of a housing section component of the adhesive tape applicator of FIG. **1**A;

[0013] FIG. **3**A is an exploded, perspective view of an application roller component of the adhesive tape applicator of FIG. **1**A;

[0014] FIG. **3**B is a perspective view of the application roller of FIG. **2**A upon final assembly;

[0015] FIG. **3**C is a cross-sectional view of the application roller of FIG. **3**A relative to a flat surface;

[0016] FIG. **4**A is an interior perspective view of a portion of a carriage assembly of the adhesive tape applicator of FIG. **1**A;

[0017] FIG. **4**B is an exterior perspective view of the carriage assembly portion of FIG. **4**A;

[0018] FIG. **5** is an exploded, perspective view of a blade assembly portion of the adhesive tape applicator of FIG. **1**A;

[0019] FIG. **6**A is an interior perspective view of a blade arm component of the blade assembly of FIG. **5**;

[0020] FIG. **6**B is a front view of the blade arm of FIG. **6**A;

[0021] FIG. **6**C is side plan view of the blade arm of FIG. **6**A;

[0022] FIG. **7**A is a side plan view of a finger structure component of the blade assembly of FIG. **5**;

[0023] FIG. **7**B is a bottom view of the finger structure of FIG. **7**A;

[0024] FIG. **8**A is a perspective view of the blade assembly of FIG. **5** upon final construction;

[0025] FIG. **8**B is a side view of the blade assembly of FIG. **8**A;

[0026] FIG. **9**A is a side view illustrating mounting of the carriage assembly of the tape applicator of FIG. **1**A to the housing section of FIG. **2** and in an application state;

[0027] FIG. **9**B is a side view of the construction of FIG. **9**A in a cut state;

[0028] FIG. **10**A is a side view illustrating mounting of the blade assembly of FIG. **5** to the construction of FIG. **9**A and in the application state;

[0029] FIG. **10**B is a side view illustrating the construction of FIG. **10**A in the cut state;

[0030] FIG. **11**A is a side view illustrating a portion of the adhesive tape applicator of FIG. **1**A maintaining a roll of adhesive tape and in the application state;

[0031] FIGS. **11**B and **11**C illustrate use of the adhesive tape applicator of FIG. **1**A in applying adhesive tape to a substrate surface;

[0032] FIGS. **12**A-**12**F schematically illustrate use of the adhesive tape applicator of FIG. **1**A in performing a cutting operation;

[0033] FIG. **12**G is a side view illustrating an arrangement of the adhesive tape applicator of FIG. **1**A loaded with a roll of adhesive tape following completion of a cutting operation; and

[0034] FIG. **13** is a side view illustrating portions of another embodiment adhesive tape applicator in accordance with principles of the present disclosure and loaded with a roll of adhesive tape.

DETAILED DESCRIPTION

[0035] One embodiment of an adhesive tape applicator **20** in accordance with principles of the present disclosure is shown in FIGS. **1**A and **1**B. When loaded with a roll of adhesive tape (not shown), the applicator **20** facilitates single-handed application and cutting of a length of tape from the roll. The applicator **20** includes a housing assembly **22**, a carriage assembly **24** (referenced generally in FIG. **1**B) and a blade assembly **26** (hidden in FIG. **1**B). Details on the various components are provided below. In general terms, however, the housing assembly **22** maintains the carriage assembly **24** and the blade assembly **26**. More particularly, the carriage assembly **24** is slidable relative to the housing assembly **22**, with articulation of the carriage assembly **24** effectuating movement of the blade assembly **26**. For example, during a cutting operation, a blade **28** provided with the blade assembly **26** is caused to sever a length of tape extending along a tape path defined by the applicator **20**. In this regard, the applicator **20** incorporates one or more features described below that interface with the tape (apart from the blade **28**) during application and cutting operations so as to prevent the tape from sticking to the blade or other components. These tape handling features account for possible contact with opposing, adhesive-bearing major surfaces of the tape such that the applicator **20** is highly useful with virtually any adhesive tape format, including double-sided adhesive tape.

Housing Assembly **22**

[0036] The housing assembly **22** includes a housing **40** and an application roller **42**. The housing **40** has an open interior for maintaining various other components and, as best shown in FIG. **1**B, defines a tape dispensing opening **44** and an optional auxiliary opening **46**. As described in greater detail below, the application roller **42** is rotatably mounted to the housing **40** adjacent the tape dispensing opening **44**. Where provided, the auxiliary opening **46** facilitates user interface with the carriage assembly **24**.

[0037] In some embodiments, the housing **40** is formed or defined by first and second housing sections **50**, **52**. The housing sections **50**, **52** are configured to be releasably mated to one another (e.g., snap fit) in collectively defining the housing **40**, with removal of the second housing section **52** from the first housing section **50** (or vice-versa) permitting user access to an interior of the housing **40** (e.g., for removing or loading a roll of tape (not shown)). In the mated state, the housing sections **50**, **52** collectively define an exterior shape or perimeter **60** of the housing **40**. With reference to an intended orientation of the applicator **20** during use, the shape or perimeter **60** can include a front side **62**, a rear side **64**, a bottom side **66**, and a top side **68**. Due to the mated construction, the following descriptions of these exterior features **60**-**68** relative to the first housing section **50** apply equally to the second housing section **52**.

[0038] An interior of one embodiment of the first housing section **50** is shown in greater detail in FIG. **2**. The first housing section **50** defines portions of the front side **62**, the rear side **64**, the bottom side **66**, and the top side **68**. As generally indicated, the tape dispensing opening **44** is formed or defined at an intersection of the front side **62** and the bottom side **66**, whereas the auxiliary opening **46** is defined along the top side **68**. In some embodiments, the bottom side **66** can be substantially flat (i.e., within 10 percent of a truly flat surface), promoting sliding movement of the housing section **50** (and thus of the housing **40** (FIG. **1**B) as a whole) along a substrate surface.

[0039] The first housing section **50** can provide various features that facilitate engagement with other components of the applicator **20** (FIG. **1**A). In this regard, the engagement features can be defined as projecting inwardly (i.e., out of the page of FIG. **2**) from a side wall **70**. For example, the first housing section **50** can include a spindle **72** (or other structure such as a collet) for rotatably receiving the application roller **42** (FIG. **1**B). In addition, the first housing section **50** can form or define a rail **74** configured to slidably maintain the carriage assembly **24** (FIG. **1**A). The rail **74** can assume a variety of forms and in some embodiments can be viewed at defining first-third sections **76**-**80**. The second section **78** is located intermediate the first and third sections **76**, **80**, and is bounded by opposing shoulders **82**, **84**. The shoulders **82**, **84** are configured to capture a biasing device of the carriage assembly **24** as described below, and can assume a variety of forms. In some embodiments, the shoulders **82**, **84** are defined as inward projections (e.g., out of the page of FIG. **2**) from the rail **74**. A stop tab **86** is optionally formed along the first section **76** and can be defined as an inward projection from a face of the rail **74** in a direction opposite the side wall **70**. As made clear below, the stop tab **86** serves as a forward stop to sliding movement of the carriage assembly **24** along the rail **74**.

[0040] One or more blade assembly engagement features **90** can also be provided with, or assembled to, the first housing section **50**. In general terms, the blade assembly engagement feature **90** is configured in accordance with complimentary features of the blade assembly **26** (FIG. **1**A) to establish a pivotable mounting of the blade assembly **26** relative to the first housing section **50** (and thus relative to the housing **40** (FIG. **1**A) upon final assembly). In some embodiments, the blade assembly engagement feature **90** is a post projecting from the side wall **70**, although a variety of other pivotable connection constructions are also acceptable.

[0041] Returning to FIG. **1**A, the second housing section **52** can include or incorporate one or more features that facilitate mounting of the carriage assembly **24** and/or the blade assembly **26**. In some embodiments, however, the mounting features are provided with only one of the housing sections **50**, **52** such that the housing sections **50**, **52** can be disassembled from one another while maintaining the mounted arrangement of the carriage assembly **24** and the blade assembly **26** relative to the first housing section **50**.

[0042] The application roller **42** is generally configured to press adhesive tape exiting the applicator **20** onto a substrate surface. The application roller **42** is configured in accordance with mounting features of the housing sections **50**, **52** (e.g., the spindle **72** (FIG. **2**)) so as to be rotatably mounted to the housing **40**. While the application roller **42** can assume a variety of forms, in some embodiments the application roller **42** is configured to readily release from adhesives conventionally employed with adhesive tapes, such as pressure sensitive adhesives. This optional easy release attribute can be provided in various manners, such as via material(s) and/or physical features of an outer surface of the application roller **42**. For example, one exemplary embodiment of the application roller **42** in accordance with principles of the present disclosure is shown in FIGS. **3**A and **3**B, and includes a mandrel **100** and a sleeve **102**. The mandrel **100** can be a tube or hub-type body configured to be rotatably mounted over the

spindle **72** or other mounting component provided with the housing **40** (FIG. **1**A). The sleeve **102** is coaxially received over the mandrel **100**, and establishes an outer surface **104** of the application roller **42** upon final assembly. In some embodiments, the sleeve **102** is formed of a material that readily releases from, or does not otherwise adhere to, adhesives (e.g., pressure sensitive adhesives) commonly used with adhesive tapes. For example, the sleeve **102** can be formed of a silicone material. Other adhesion-resistant or non-stick materials or coatings are also acceptable, such as fluoropolymers, coated elastomeric materials, etc. In addition, the sleeve **102** can form the outer surface **104** to have reduced surface contact with a flat surface otherwise in contact with the outer surface **104**. For example, the sleeve **102** can form or comprise a plurality of spaced apart, circumferential ribs **106**. As shown in FIG. **3**C, when the application roller **42** is directed into contact with a relatively flat surface S (e.g., a major surface of an adhesive tape otherwise being applied to a flat substrate surface), the surface S contacts the outer surface **104** of the application roller **42** only at the ribs **106**. In other words, the application roller **42** is not in contact with the surface S at the spacings between the ribs **106**, thus reducing the overall surface area of contact (and surface energy). Other outer surface texturing formats are also envisioned. Regardless, by minimizing the surface contact, optionally in combination with use of a release material (e.g., silicone), an adhesive-bearing surface placed into contact with the application roller **42** is unlikely to "stick" to the outer surface **104**.

Carriage Assembly **24**

[0043] Returning to FIGS. **1**A and **1**B, the carriage assembly **24** includes a carriage body **120**, a hub **122**, an idler roller **124**, and an optional biasing device **126**. In general terms, the carriage body **120** maintains the hub **122** and the idler roller **124**, and is slidably coupled to the housing **40**. The biasing device **126**, where provided, biases the carriage body **120** to a first position relative to the housing **40**, and can be a coil spring. Further, the biasing device **126** permits sliding movement of the carriage body **120** in response to a user-applied force, such as during a cutting operation. In this regard, the carriage assembly **24** can further optionally include an actuator **128** coupled to the carriage body **120** and configured to facilitate actuation of the carriage assembly **24** by the user as described in greater detail below.

[0044] The carriage body **120** and the hub **122** are shown in greater detail in FIGS. **4**A and **4**B. As implicated by the views, in some embodiments the carriage body **120** and the hub **122** can be integrally formed. Regardless, the carriage body **120** includes a panel **140** that is generally sized and shaped to be received within the housing **40** (FIG. **1**A). The panel **140** defines a front face **142** (FIG. **4**A) and a rear face **144** (FIG. **4**B), and forms or includes various features that facilitate mounting with the housing **40**. For example, first and second pairs of guide tabs **146**, **148** can be formed as projections from the rear face **144**, each defining a channel **150** sized to slidably receive the rail **74** (FIG. **2**). A slot **152** is formed through a thickness of the panel **140**, and is sized to slidably receive the stop tab **86** (FIG. **2**). In some embodiments, a shelf **154** projects from the rear face **144** in alignment with the slot **152**. The shelf **154** in combination with a structure of a pocket **156** (described in greater detail below) further serves to slidably engage the rail **74**. Alternatively, the carriage assembly **24** can incorporate other features for effectuating slidable engagement with the housing **40**.

[0045] With embodiments incorporating the spring biasing device **126** (FIG. **1**A), the carriage body **120** includes or forms a frame **158** sized and shaped to capture the spring **126**. The frame **158** projects from the front face **142**, for example in a region of the hub **122**, with the panel **140** forming an aperture **160** that is aligned with the frame **158** for reasons made clear below. Further, the frame **158** can form or define a groove **162** that facilitates assembly with the housing **40** (FIG. **1**A).

[0046] In addition to providing features that promote mounting with the housing **40** (FIG. **1**A), the carriage body **120** can form or include additional features that facilitate articulating connection with the blade assembly **26** (FIG. **1**A). For example, the pocket **156** is formed as a depression in the front face **142** of the panel **140**, and defines a bearing surface **164**. The pocket **156** is sized and shaped to slidably receive a corresponding component of the blade assembly **26** as described below, and can include a notch **166** through a thickness of the panel **140** for slidably receiving other components. Finally, the carriage body **120** can include or define a camming member **168** and a support block **170** as inward projections from the front face **142**. The camming member **168** can assume a variety of forms, and is generally constructed to slidably interface with a corresponding component of the blade assembly **26** as described below. The support block **170** is aligned with, but spaced from, the camming member **168**, and is also configured to interface with the blade assembly **26** in a prescribed manner.

[0047] Other mounting features optionally provided with the carriage body **120** can include a spindle **180** or similar structure projecting from the front face **142** and configured to rotatably maintain the idler roller **124** (FIG. **1**A). A bracket **182** can be formed or provided along the front face **142** and is generally constructed for assembly with the actuator **128** (FIG. **1**A).

[0048] The carriage body **120** can optionally form or provide additional features for interfacing with a length of adhesive tape (not shown) otherwise extending from a region of the hub **122**. For example, in some embodiments, a platform **190** projects from the front face **142** of the panel **140** and provides a surface for selectively interfacing with an adhesive tape, for example during a cutting operation. In this regard, the platform **190** optionally forms or defines a textured surface **192**, for example the spaced apart ribbed format shown.

[0049] The hub **122** projects from the front face **142** of the panel **140**, and is generally sized and shaped to rotatably maintain a roll of adhesive tape (not shown). While the hub **122** is shown as being affixed to the panel **140**, other configurations appropriate for rotatably maintaining a roll of adhesive tape are equally acceptable.

[0050] Returning to FIG. **1**A, the idler roller **124** is configured for rotatable mounting to the spindle **180** of the carriage body **120** (or other optional mounting component), and is generally constructed to selectively interface with a length of adhesive tape. In some embodiments, an outer surface of the idler roller **124** readily releases from adhesives commonly employed with adhesive tapes (e.g., pressure sensitive adhesives), and thus can have any of the formats described above with respect to the application roller **42** (e.g., the attributes described above with respect to the sleeve **102** in FIGS. **3**A-**3**C).

[0051] The actuator **128** can assume any form conducive to receiving a user-applied force, and transferring the force into a sliding motion of the carriage body **120** relative to the

housing **40**. While the actuator **128** is shown as being a component formed apart from the carriage body **120**, in other embodiments the actuator **128** is integrally formed by or with the carriage body **120**.

Blade Assembly **26**

[0052] The blade assembly **26** is shown in greater detail in FIG. **5**, and includes the blade **28**, a blade arm **200**, and at least one pressing finger **202**. In general terms, the blade arm **200** maintains the blade **28** and the pressing finger(s) **202**, and is configured for pivoting connection with the housing **40** (FIG. **1**A).

[0053] With additional reference to FIG. **6**A-**6**C, the blade arm **200** defines a leading end **210**, a trailing or pivot end **212**, an upper face **214**, and a lower face **216**. The leading end **210** is configured to facilitate mounting of the blade **28**, and can form or provide one or more rivet bodies **218**. The pivot end **212** is defined opposite the leading end **210**, and is configured to establish pivotable mounting with a corresponding component of the housing assembly **22** (FIG. **1**A). For example, the trailing end **212** can include a bore **220** sized to receive the post **90** (FIG. **2**). Regardless, a pivot axis P about which the blade arm **200** rotates or pivots upon final assembly is defined. The upper face **214** is shaped to effectuate a desired cammed interface of the blade arm **200** with the carriage assembly camming member **168** (FIG. **4**A). For example, and as best shown in FIG. **6**C, the upper face **214** can be relatively flat or planar adjacent the leading end **210**, and forms or defines an inclined region **230** adjacent the pivot end **212**. For reasons made clear below, a crank arm **232** projects from the pivot end **212** (i.e., away from the lower face **216**), and compliments (in combination with other features) the camming-induced articulation motion effectuated along the upper face **214**.

[0054] Returning to FIG. **5**, the blade arm **200** is further configured to facilitate mounting of the pressing finger(s) **202**. In some embodiments, the pressing finger(s) **202** is provided as part of a pressing finger structure **240** that includes a plurality of the pressing fingers **202** projecting from a base **242**. With this in mind, the blade arm **200** can form a cavity **244** sized and shaped to frictionally maintain the base **242** in a manner that arranges the pressing fingers **202** as outward projections from the lower face **216**. In some embodiments, a cap **246** can further be provided that is assembled to the cavity **244** adjacent the base **242** so as to be contiguous with the upper face **214** upon final assembly.

[0055] Features of the pressing finger structure **240** are described in greater detail below with reference to the blade arm **200** upon final assembly. In general terms, however, and with additional reference to FIGS. **7**A and **7**B, the finger structure **240** includes the base **242** and the at least one pressing finger **202**. With the exemplary embodiment of FIGS. **7**A and **7**B, three of the pressing fingers **202** are provided, including a first pressing finger **202***a* longitudinally offset from second and third pressing fingers **202***b*, **202***c*. In other embodiments, a greater or lesser number of the pressing fingers **202** can be included, including only a single one of the pressing fingers (e.g., the first pressing finger **202***a*). The pressing finger(s) **202** extends in an angular fashion from the base **242**, with the angular arrangement of the pressing finger (s) **202** relative to the base **242** generating a desired spatial arrangement of the pressing finger(**2**) **202** relative to the blade arm **200** upon final assembly. As described below, the pressing finger(s) **202** is configured to interface with a tensioned, adhesive-bearing surface, for example an adhesive surface of an adhesive tape, and in some embodiments is flexible (e.g., elastically deformable) and exhibits an easy or low release characteristic. For example, the pressing finger(s) **202** can be formed of silicone, a fluoropolymer, or coated elastomeric materials (e.g., a plasma coating creating the low release coating or non-stick surface), etc.; in other embodiments, an entirety of the finger structure **240** is formed of the flexible, low release material (or low release coating). Elastic flexibility of the pressing finger(s) **202** can alternatively be described relative to a rigidity of the blade arm **200**. The blade arm **200** is more rigid or less flexible than the pressing finger(s) **202** (e.g., the blade arm **200** is a molded, rigid plastic material whereas the pressing finger(s) **202** is a deformable silicone body). Thus, the pressing finger(s) **202** will elastically deform or deflect while the blade arm **200** remains rigid when subjected to an identical force. A similar comparison can be made between a flexibility of the pressing finger(s) **202** and a flexibility of the blade **28**. The pressing finger(s) **202** is significantly more flexible than the rigid blade **28**.

[0056] Returning to FIG. **5**, the blade **28** can assume a variety of forms, and in some embodiments includes two (or more) blade segments **250**, **252** that combine to define the blade **28** upon final assembly. In other embodiments, the blade **28** can be a homogeneous, integral structure.

[0057] Final construction of the blade assembly **26** is shown in FIGS. **8**A and **8**B. The blade **28** is affixed to the leading end **210** of the blade arm **200**, and extends downwardly relative to the lower face **216**. In this regard, the blade **28** terminates at a blade tip **260** opposite the blade arm **200**. The pressing fingers **202***a*-**202***c* also project from the lower face **216** of the blade arm **200**, and each terminate at a contact end **262** opposite the blade arm **200**. The pressing fingers **202***a*-**202***c* are generally arranged to interface with a length of tape otherwise being cut by the blade **28** as the blade arm **200** is rotated about the pivot axis P. These attributes are facilitated, for example, by an angular orientation of the pressing fingers **202***a*-**202***c*, as well as a length of the pressing fingers **202***a*-**202***c*. For example, at least with respect to the first pressing finger **202***a*, an included angle θ is established by a plane of the blade **28** and a plane of the first pressing finger **202***a*. In some embodiments, the included angle θ is at least 5 degrees, and in some embodiments is at least 10 degrees. The second and third pressing fingers **202***b*, **202***c* can be arranged to establish a similar included angle relative to the blade **28**. Regardless, to better ensure that the contact end **262** of at least the first pressing finger **202***a* contacts adhesive tape in conjunction with the blade **28** with rotation of the blade arm **200** about the pivot axis P, the first pressing finger **202***a* extends an appreciable distance from the lower face **216**, generally commensurate with a longitudinal location of the blade tip **260**. In other embodiments, a length of the first pressing finger **202***a* can be identified relative to an articulation plane A defined by the blade tip **260** and the pivot axis P. The first pressing finger **202***a* passes through or intersects the articulation plane A. This geometry better ensures that the contact end **262** of the first pressing finger **202***a* will contact a structure "behind" the blade tip **260** (to the right relative to the orientation of FIG. **8**B) as the blade arm **200** is rotated above the pivot axis P (counterclockwise relative to the orientation of FIG. **8**B).

Applicator Assembly

[0058] FIG. **9**A illustrates the carriage assembly **24** mounted to the first housing section **50**. The carriage body **120** is slidably connected to the rail **74**, for example via the

pairs of guide tabs **146**, **148** (FIG. **4**B). The spring (or other biasing device) **126** is disposed within the frame **158**, and is captured at opposing ends thereof by the first and second shoulders **82**, **84** (it being understood that the first shoulder **82** is hidden in the view of FIG. **9**A, but is illustrated in FIG. **2**). The second shoulder **84** projects beyond the spring **126** into abutment with the hub **122** and is slidably disposed within the groove **162**. The stop tab **86** is slidably disposed within the slot **152**. The post **90** is located within the notch **166**. The actuator **128**, where provided, is assembled to the carriage body **120** and is arranged within the auxiliary opening **46**. With this construction, the spring **126** biases the carriage body **120** to the first or application state of FIG. **9**A. The carriage body **120** can be transitioned to a second or cut state of FIG. **9**B in response to a force placed upon the actuator **128** that in turn causes the carriage body **120** to slide along the rail **74** (i.e., relative to the orientation of FIGS. **9**A and **9**B, the carriage body **120** is caused to move generally to the right (toward the rear side **64**) in transitioning from the application state (FIG. **9**A) to the cut state (FIG. **9**B)). The stop tab **86** serves as a forward stop to further sliding movement of the carriage body **120**. Upon removal of the actuation force, the carriage assembly **24** self-returns to the first or application state of FIG. **9**A via the spring **126**.

[0059] FIG. **10**A illustrates mounting of the blade assembly **26** to the carriage assembly **24** and the first housing section **50** (and reflects the application state of the applicator **20**). The pivot end **212** of the blade arm **200** is rotatably coupled to the post **90** (hidden in FIG. **10**A but shown, for example, in FIG. **9**A) of the first housing section **50**. The crank arm **232** is located within the pocket **156**. The carriage assembly **24** retains the blade arm **200** in the spatial arrangement shown via the camming member **168** and the support block **170**. More particularly, the camming member **168** engages or is slightly spaced from the upper face **214** of the blade arm **200**, whereas the support block **170** engages or is slightly spaced from the lower face **216**. Thus, the blade arm **200** is prevented from freely rotating about the pivot axis P relative to the carriage body **120**. In the first or application state of FIG. **10**A, the blade tip **260** and the pressing finger contact ends **262** are spatially located away from a tape path defined by and between the application and idler rollers **42**, **124** as described below.

[0060] Transitioning of the carriage body **120** from the application state to the cut state effectuates articulation of the blade assembly **26** as reflected by FIG. **10**B. In particular, because the blade arm **200** is spatially connected to the first housing section **50** via the post **90** (FIG. **9**A), the blade arm **200** does not slide rearwardly with the carriage body **120**. However, as the bearing surface **164** (hidden in FIG. **10**B, but shown in FIG. **10**A) of the pocket **156** contacts the crank arm **232**, and as the camming member **168** slides along the inclined region **230** of the blade arm upper face **214**, the blade arm **200** is caused to pivot or rotate about the pivot axis P (counterclockwise relative to the orientation of FIGS. **10**A and **10**B), in turn causing the blade tip **260** and the pressing finger contact ends **262** to pass through a tape path defined by and between the application and idler rollers **42**, **124** as described below.

[0061] As a point of reference, the various components and mechanisms described above for effectuating articulation of the blade tip **260** and the pressing finger contact ends **262** relative to the application and idler rollers **42**, **124** (and thus relative to the tape path defined by the rollers **42**, **124**) are but one acceptable embodiment. A variety of other components, mechanisms and/or assembly techniques can be employed. Features of the present disclosure relate to the manners in which the pressing finger(s) **202** interface with the adhesive tape during the cutting operation formed by the blade **28**, as well as an optional low or easy release adhesive surface interface established along the application and idler rollers **42**, **124**.

Methods of Use

[0062] FIG. **11**A illustrates, in simplified form, an adhesive tape roll **300** rotatably mounted to the hub **122**, with the applicator **20** in the initial or application state. As a point of reference, systems of the present disclosure constitute the applicator **20** loaded with the tape roll **300**. A length of adhesive tape **302** extends from the roll **300** along a tape path T defined, at least in part, by the application and idler rollers **42**, **124**. The adhesive tape **302** otherwise comprising the roll **300** can assume a variety of forms, and generally include a base film or film structure defining opposing, first and second major surfaces **304**, **306**. One or both of the major surfaces **304**, **306** can carry an exposed adhesive (e.g., pressure sensitive adhesive coating). That is to say, the adhesive tape **302** can be a single-sided or double-sided adhesive tape. In the application state of FIG. **11**A, the tape path T includes the first major surface **304** in contact with the idler roller **124**, and the second major surface **306** in contact with the application roller **42**. With this arrangement, the length of tape **302** extends from the roll **300**, along the tape path T, and is available for application to a substrate surface via the tape dispensing opening **44**.

[0063] For example, as shown in FIG. **11**B, with the applicator **20** in the application state, a leading end **310** of the adhesive tape **302** is adhesively secured or tacked to a substrate surface **312**, establishing a tacked region **314**. A user grasping the applicator housing **40** manually applies pressure onto the application roller **42** while simultaneously pulling the housing **40** away from the leading end **310**. With this technique, the adhesive tape **302** is caused to unwind from the roll **300** and successively progress along the tape path T with a now longer tacked region **314** being secured onto the substrate surface **312** as shown in FIG. **11**C. Notably, the application roller **42** readily rolls along the second major surface **306** during application of the tape **302** to the substrate surface **312**. With embodiments in which the second major surface **306** carries an exposed adhesive, the release attributes of the application roller **42** as described above (e.g., forming an outer surface of the application roller **42** from silicone or other low release material and/or inclusion of the circumferential ribs or other texturing), the adhesive-bearing second major surface **306** will not stick to the application roller **42**.

[0064] Once a desired length of the tape **302** has been applied to the substrate surface **312**, the applicator **20** is operated to cut the tape **302**. Prior to initiation of the cutting operation, the adhesive tape **302** is generally held in tension between the application and idler rollers **42**, **124** and is identified as an intermediate tape segment **320** in FIG. **12**A. The blade **28** and the pressing finger(s) **202** are spaced from the intermediate tape segment **320** (and the tape path T). The carriage assembly **24** (FIG. **1**A) is then transitioned toward the cut state by a user-applied force on the actuator **128** (FIG. **1**A) as described above. As the blade arm **200** is pivoted to bring the blade tip **260** into contact with the tape **302**, the pressing finger(s) **202** also interfaces with the adhesive tape

302. For example, in the arrangement of FIG. **12**B (otherwise schematically illustrating an intermediate stage of operation as the applicator **20** is transitioned toward the cut state), the blade arm **200** has been rotated or maneuvered to bring the blade **28** and the pressing finger(s) **202** nearly into contact with the second major surface **306** of the adhesive tape **302**. Recalling that the blade arm **200** is rotating about the pivot axis P, the contact end **262** of the first pressing finger **202***a* contacts the adhesive tape **302** just prior to the blade tip **260** as shown. In other embodiments, the blade **28** and the first pressing finger **202***a* contact the adhesive tape **302** simultaneously, or the blade **28** may contact the adhesive tape **302** immediately before the first pressing finger **202***a*.

[0065] With further rotation of the blade arm **200** (i.e., transitioning from the arrangement of FIG. **12**B to the successively next intermediate stage of operation arrangement of FIG. **12**C), the first pressing finger **202***a* more robustly contacts the intermediate tape segment **320**. Because the intermediate tape segment **320** is under tension between the application and idler rollers **42**, **124**, the adhesive tape **302** exerts a resistance force onto the first pressing finger **202***a*. The angled orientation of the first pressing finger **202***a* in combination with the flexible material employed for the first pressing finger **202***a* results in the first pressing finger **202***a* deforming or deflecting in response to this resistance. That is to say, the first pressing finger **202***a* does not rigidly retain its linear shape, but instead slightly deforms, with the contact end **262** deflecting toward the blade **28**. In the state of FIG. **12**C, the blade tip **260** has pierced through a portion of the adhesive tape **302**, but the adhesive tape **302** has not yet been completely severed. As a point of reference, the blade tip **260** can have the tapered shape shown in FIG. **8**A, increasing in width from a central point; while a complete width of the blade tip **260** is commensurate with a width of the adhesive tape **302**, in the initial stages of cutting (e.g., the arrangement of FIG. **12**C), only a portion (e.g., the central point) of the complete width of the blade tip **260** has passed through the adhesive tape **302**, such that the entire width of the adhesive tape **302** has not been entirely cut. This relationship is reflected in FIG. **12**D, that otherwise provides a simplified, enlarged cross-section of the blade tip **260** and the adhesive tape **302** corresponding with the state of FIG. **12**C. As shown, a portion of the blade tip **260** has initially pierced through the adhesive tape **302**. A width W_C of the cut formed by the blade tip **260** is less than a width W_T of the adhesive tape **302**. Thus, the adhesive tape **302** is still intact and is not yet completely severed. As a result, and returning to FIG. **12**C, a tension in the adhesive tape **302** remains, causing deformation of the first pressing finger **202***a* as described above.

[0066] Elastic deflection or deformation of the first pressing finger **202***a* continues with further rotation of the blade arm **200**, with the blade arm rotation simultaneously directing the blade tip **260** to progressively pierce through an increasing portion of the width W_T (FIG. **12**D) of the tape **302**. This arrangement is shown in FIG. **12**E. Notably, where the first pressing finger **202***a* is formed of a low release material or coating (e.g., silicone), the contact end **262** (and other exterior surfaces of the first pressing finger **202***a*) readily slides along the second major surface **306** of the adhesive tape **302** in connection with the above-described deflection, even when the adhesive tape **302** is a double-sided adhesive tape (i.e., the second major surface **306** carries an exposed adhesive). FIG. **12**E further reflects that the second pressing fingers **202***b* can also contact the tensioned adhesive tape **302** and, due to a flexible construction, elastically flex or deflect. Notably, as the blade tip **260** is driven toward (and through) the adhesive tape **302**, the adhesive tape **302** can be forced to deflect downwardly (relative to the orientation of FIG. **12**E) at the blade tip **260** interface, and, due to various component geometries, come into contact with the platform **190**.

[0067] At the end of the cutting motion, the blade tip **260** has progressed through an entire thickness and width of the tape **302** as shown in FIG. **12**F, severing the intermediate tape segment **320**. Once severed, the adhesive tape **302** can effectively be defined as having an applied portion **330** downstream of the cut line that is now applied to the substrate surface **312**. A remaining portion **332** (upstream of the cut line) is still connected to, or is part of, the tape roll **300** (FIG. **11**A), and terminates at a leading end **334**. The first pressing finger **202***a* serves to prevent the leading end **334** from extending along, or "riding up" on the blade **28**, it being noted that once the adhesive tape **302** has been severed, the tensioned resistance force imparted upon the first pressing finger **202***a* is removed, and the first pressing finger **202***a* resiliently self-reverts back to its natural shape as shown. The second and third pressing fingers **202***b*, **202***c* can force the adhesive tape **302** onto the platform **190**. Thus, an entirety of the remaining portion **332**, including the "new" leading end **334**, is held away from the blade **28**. As the carriage assembly **24** is allowed to revert back to the first or application state, the blade arm **200** is caused to again pivot, bringing the blade **28** and the pressing fingers **202***a*-**202***c* out of the tape path T as shown in FIG. **12**G. In this regard, even if the second major face **306** carries an exposed adhesive, the remaining portion **332** of the adhesive tape **302** will not unexpectedly "move" with the blade assembly **26**. As described above, the remaining portion **332** is spaced from, and does not contact, the blade **28**. Further, while one or more of the pressing fingers **202** are in direct contact with the second major surface **306**, the low adhesion/release material (e.g., silicone) construction of the pressing fingers **202** has minimal or no adhesion with the exposed adhesive. Along these same lines, the first major surface **304** may lightly adhere to the platform **190**, allowing the pressing fingers **202** to readily release from the second major surface **306** as the blade arm **200** articulates the pressing fingers **202** away from the tape **302**. The platform **190** simultaneously directs the leading end **334** to the tape dispensing opening **44** such that the leading end **334** is now readily available for subsequent adhesive tape application operation.

[0068] Use of the adhesive tape applicator **20** in applying the adhesive tape **302** to the substrate surface **312** can optionally entail the bottom side **66** readily sliding along, or in close proximity to, the substrate surface **312** (under circumstances where the substrate surface **312** is relatively flat). In some embodiments, the substantially flat bottom side **66** also facilitates temporary storage of the applicator **20** in the upright orientation on the substrate surface **312** (e.g., during periods of non-use, the applicator **20** is upright, with the bottom side **66** resting on the substrate surface **312**).

[0069] With the alternative adhesive tape applicator **20'** of FIG. **13**, a stand-off device **400** is included that lifts the application roller **42** away from the substrate surface **312** during periods of non-use. The stand-off device **400** can assume a variety of forms, and in some constructions includes a head **402** and a leaf spring or other biasing device **404**. The leaf spring **404** connects the head **402** to the housing **40**. In a normal state of the leaf spring **404**, the head **402** is located

such that a leading face **406** is located outside of the housing **40**. In the upright storage orientation of FIG. **13**, then, the applicator **20'** is maintained upright relative to the substrate surface **312**, resting on the leading face **406** of the head **402** and rear corner **408** of the housing **40**. As shown, the application roller **42** as well as the leading end **310** of the adhesive tape **302** is held above or away from the substrate surface **312**.

[0070] When a user desires to apply the adhesive tape leading end **310** to the substrate surface **312**, a downward force is applied to the housing **40** with the user's hand. Once sufficient force is applied to overcome a bias of the leaf spring **404** (i.e., via a resistance force experienced by the head **402** at the substrate surface **312**), the head **402** retracts into the housing **40**. As a result, the leading end **310** is brought to contact with the substrate surface **312**, including the application roller **42** pressing on to the adhesive tape **302**. Application and cutting operations can then be performed as described above.

[0071] The adhesive tape applicators, system and methods of the present disclosure provide a marked improvement over previous designs. Adhesive tapes, including double-sided adhesive tapes, are readily applied to a substrate surface and subsequently cut with single-handed operation. In this regard, the flexible pressing finger(s) provided with the tape applicators ensure consistent, jam-free operation, preventing the adhesive tape from adhesively "catching" on the cutting blade. Other optional features, such as low surface energy contact rollers, further enhance handling of adhesive-bearing tape surfaces.

[0072] Although the present invention has been described with reference to preferred embodiments, workers skilled in the art will recognize that changes can be made in form and detail without departing from the spirit and scope of the present invention.

1. An adhesive tape applicator comprising:
a housing assembly including:
a housing defining a tape dispensing opening,
an application roller rotatably mounted to the housing adjacent the tape dispensing openings;
a carriage assembly including:
a carriage body slidably mounted within the housing,
a hub carried by the carriage body and configured to rotatably support a roll of tape,
an idler roller rotatably mounted to the carriage body; and
a blade assembly including:
a blade arm defining a pivot end pivotably mounted to the housing such that the blade arm is pivotable relative to the housing about a pivot axis,
a blade projecting from the blade arm opposite the pivot end and terminating in a blade tip,
wherein an articulation plane is defined by the blade tip and the pivot axis,
a first pressing finger projecting from the blade arm at a location between the blade and the pivot end, the first pressing finger extending through the articulation plane;
wherein the applicator defines a tape path from the hub to the tape dispensing opening, the tape path being defined, at least in part, by the application and idler rollers;
and further wherein the tape applicator is configured to be transitionable between an application state in which the blade tip is at a first side of the tape path and a cut state in which the blade tip is located at an opposite, second side of the tape path.

2. The tape applicator of claim **1**, wherein the first pressing finger is flexible.

3. The tape applicator of claim **2**, wherein the flexibility of the first pressing finger is greater than the flexibility of the blade arm.

4. The tape applicator of claim **1**, wherein the first pressing finger is silicone.

5. The tape applicator of claim **1**, wherein the first pressing finger is configured to deflect upon forced contact with a tape extending along the tape path and tensioned between the application and idler rollers as the applicator is transitioned from the application state toward the cut state.

6. The tape applicator of claim **5**, wherein the first pressing finger terminates at a contact end opposite the blade arm, and further wherein the first pressing finger is configured such that deflection of the first pressing finger in response to contacting a tape extending along the tape path includes the contact end moving more proximate the blade.

7. The tape applicator of claim **1**, wherein the first pressing finger terminates at a contact end opposite the blade arm, and further within the contact end and the blade tip are spatially arranged such that as the applicator is transitioned from the application state toward the cut state, the contact end intersects the tape path prior to the blade tip.

8. The tape applicator of claim **1**, wherein the blade assembly further comprises a second pressing finger extending from the blade arm at a location between the first pressing finger and the pivot end.

9. The tape applicator of claim **8**, wherein the first and second pressing fingers are flexible.

10. The tape applicator of claim **9**, wherein a length of the first pressing finger in extension from the blade arm is greater than a length of the second pressing finger in extension from the blade arm.

11. The tape applicator of claim **1**, wherein an outer surface of the application roller is a silicone material.

12. The tape applicator of claim **1**, wherein an outer surface of the idler roller is a silicone material.

13. The tape applicator of claim **1**, wherein an outer surface of the application roller includes a plurality of spaced apart, circumferential ribs.

14. The tape applicator of claim **1**, wherein an outer surface of the idler roller includes a plurality of spaced apart, circumferential ribs.

15. A system for applying adhesive tape, the system comprising:
a roll of adhesive tape; and
an applicator comprising:
a housing assembly including:
a housing defining a tape dispensing opening,
an application roller rotatably mounted to the housing adjacent the tape dispensing opening,
a carriage assembly including:
a carriage body slidably mounted within the housing,
a hub carried by the carriage body and rotatably maintaining the roll of adhesive tape,
an idler roller rotatably mounted to the carriage body,
a blade assembly including:
a blade arm defining a pivot end pivotably mounted to the housing such that the blade arm is pivotable relative to the housing about a pivot axis,

a blade projecting from the blade arm opposite the pivot end and terminating in a blade tip,

a first pressing finger projecting from the blade arm at a location between the blade and a pivot end, the first pressing finger terminating at a contact end opposite the blade arm;

wherein upon final assembly, the system is configured to provide an application state in which a length of tape extends from the roll to the idler roller and then to the application roller for dispensement through the dispensing opening, the application state including the blade and the pressing finger being displaced from the length of tape;

and further wherein the system is transitionable from the application state to a cut state in which the blade tip is progressed through the length of tape to sever the length of tape;

and even further wherein transitioning of the system from the application state to the cut state includes the contact end initially contacting the length of tape and then deflecting toward the blade.

16. The system of claim **15**, wherein the adhesive tape of the roll of adhesive tape is a double-sided adhesive tape.

17. The system of claim **15**, wherein the pressing finger is silicone.

18. The system of claim **15**, wherein an outer surface of the application roller is a silicone material.

19. The system of claim **15**, wherein an outer surface of the application roller includes a plurality of spaced apart, circumferential ribs.

20. A method of dispensing an adhesive tape, the method comprising:

receiving a system including an applicator maintaining a roll of adhesive tape, the applicator including:

a housing assembly including:

a housing defining a tape dispensing opening,

an application roller rotatably mounted to the housing adjacent the tape dispensing opening,

a carriage assembly including:

a carriage body slidably mounted within the housing,

a hub carried by the carriage body and rotatably maintaining the roll of adhesive tape,

an idler roller rotatably mounted to the carriage body,

a blade assembly including:

a blade arm defining a pivot end pivotably mounted to the housing such that the blade arm is pivotable relative to the housing about a pivot axis,

a blade projecting from the blade arm opposite the pivot end and terminating in a blade tip,

a first pressing finger projecting from the blade arm at a location between the blade and the pivot end, the first pressing finger terminating at a contact end opposite the blade arm;

wherein in an application state of the system, a leading segment of a length of tape from the roll extends into the dispensing opening and is supported by the application roller;

pressing the leading segment into adhesive contact with a substrate surface to define a tacked region;

manipulating the housing to draw the applicator away from the tacked region while simultaneously maintaining a pressing force on the application roller to successively dispense an additional segment of the length of tape from the applicator and into adhesive contact with the substrate surface; and

actuating the carriage assembly to pivot the blade arm, including the pressing finger and the blade contacting the length of tape between the application and idler rollers, to completely sever the length of tape;

wherein prior to the blade tip completely severing the length of tape, a contact end of the pressing finger contacts the length of tape and, with further pivoting movement of the blade arm, deflects toward the blade due to a tensioned rigidity of the length of tape.

21. The method of claim **20**, wherein the adhesive tape of the roll of adhesive tape is a double-sided adhesive tape.

22. The method of claim **20**, wherein the step of actuating the carriage assembly includes the contact end of the pressing finger contacting an adhesive side of the adhesive tape, the method further including the adhesive side not adhering to the contact end.

23. The method of claim **20**, wherein the pressing finger is silicone.

24. The method of claim **20**, wherein an adhesive side of the adhesive tape contacts the application roller during the step of manipulating the housing, the method further included the adhesive side not adhering to the application roller.

25. The method of claim **20**, wherein an outer surface of the application roller is a silicone material.

26. The method of claim **20**, wherein an outer surface of the application roller includes a plurality of spaced apart, circumferential ribs.

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