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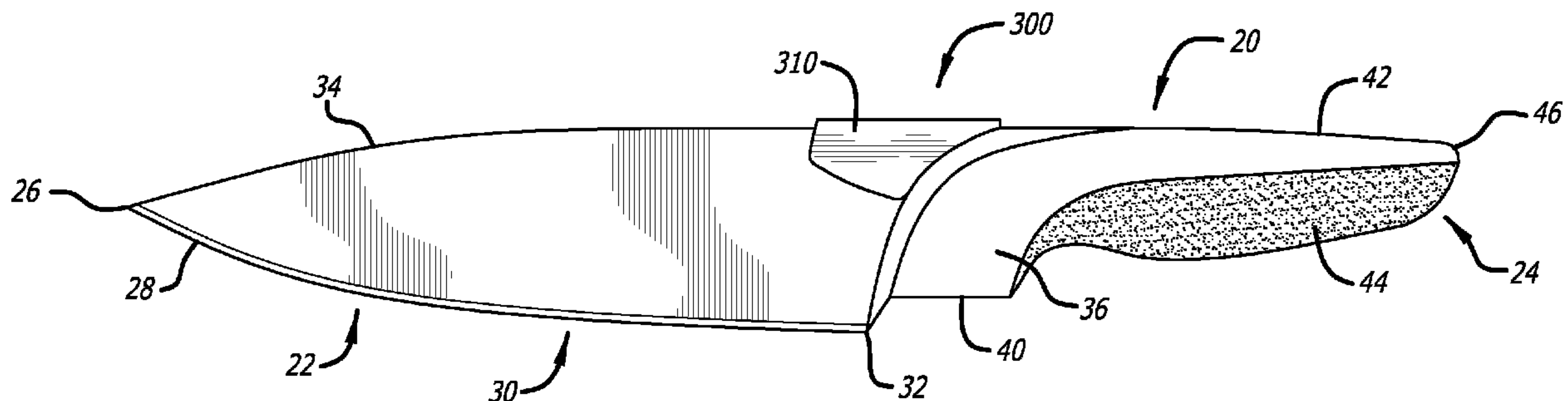
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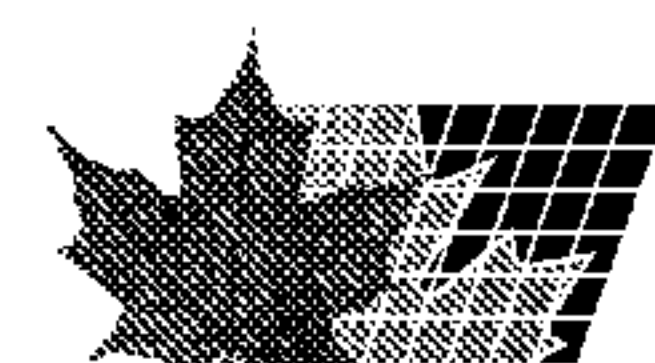
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(57) Abrégé/Abstract:

A knife and chopping attachment assembly for chopping food products comprises a knife and a chopping attachment. The knife has a blade portion and a handle portion. The blade portion has a cutting edge and a spine disposed on a top side of the blade portion generally opposite the cutting edge. The chopping attachment is disposed over a portion of the spine of the knife. The chopping attachment is movable along the spine from a proximal end of the blade portion to a distal end of the blade portion.





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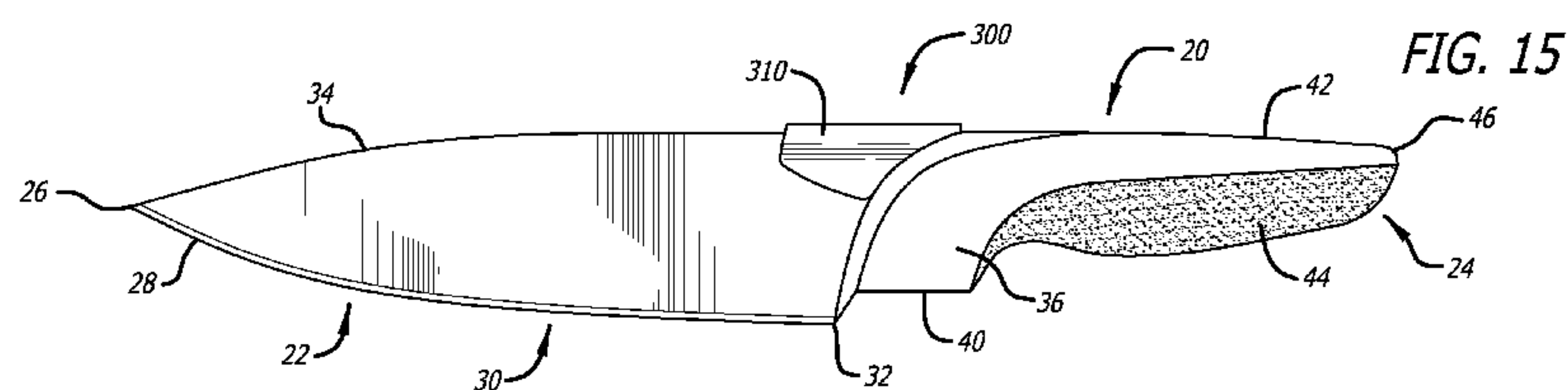
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(54) Title: SLIDABLE CHOPPING ATTACHMENT FOR KITCHEN KNIVES



(57) Abstract: A knife and chopping attachment assembly for chopping food products comprises a knife and a chopping attachment. The knife has a blade portion and a handle portion. The blade portion has a cutting edge and a spine disposed on a top side of the blade portion generally opposite the cutting edge. The chopping attachment is disposed over a portion of the spine of the knife. The chopping attachment is movable along the spine from a proximal end of the blade portion to a distal end of the blade portion.

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## SLIDABLE CHOPPING ATTACHMENT FOR KITCHEN KNIVES

### TECHNICAL FIELD

[0001] The present disclosure relates generally to cutlery devices such as knives and more specifically to a chopping attachment for a knife to promote grasping of a knife in a manner to ease chopping of food products.

### BACKGROUND OF THE INVENTION

[0002] Knives are one of the most frequently used cutlery devices found in a kitchen. Knives may be utilized for a variety of cutting operations such as slicing, chopping, paring, peeling, and other tasks. As these tasks utilize different motions with a knife, a variety of knives are typically found in a kitchen, such as butcher's knives, chef's knives, paring knives, bread knives, steak knives, and the like. FIG. 1 shows an existing chef's knife 10. The chef's knife 10 has a blade portion 12 and a handle portion 14. The knife 10 has a point A at a distal end of the blade portion 10 that may be used to pierce an item being cut. A tip region B is also found on the blade portion 12. The tip B is usually associated with about one-third of the blade portion 12 at the distal end. The tip B is typically used for smaller cutting tasks, and may be referred to as belly or curve of the chef's knife 10. An edge C is provided on one side of the blade portion 12. The edge C is the cutting surface of the knife 10. The edge C may be beveled or symmetric. A heel D is provided near a proximal end of the blade portion 12. The heel D is a portion of the edge C typically used for cutting activities that require a large amount of force. A spine E is disposed on a side of the blade portion 12 opposite of the edge C. The spine E is typically thicker than the edge C and provides weight and strength to the blade portion 12. A bolster F is provided at a transition of the blade portion 12 to the handle portion 14. The bolster F is typically thicker than the blade portion 12 and adds weight and balance to the knife 10. The bolster F additionally provides an area to prevent a user's hand from slipping on the knife 10. The bolster F has a finger guard G. The finger



guard G is provided to help prevent a user's hand from slipping onto the blade portion 12. Finally, the blade portion 12 includes a return H. The return H is the location of the blade portion 12 where the heel D contacts the bolster F.

[0003] The handle portion 14 of the knife 10 includes a tang J. The tang J is typically metal, and usually formed from the metal used to create the blade portion 12. The tang J provides structural stability to the knife 10. The handle portion 14 may additionally have scales K. The scales K are typically provided on both sides of the tang J and provide a location for a user to grasp the handle portion 14. The scales K may be made of plastic, wood, composites, or other materials. The scales K are attached to the tang J via rivets L. As shown in FIG. 1, three rivets L are provided. A handle guard M may also be provided at a proximal end of the handle portion 14. The handle guard M provides a lip that helps prevent a user's hand from slipping off of the proximal end of the handle portion 14. Finally a butt N is formed at the proximal end of the handle portion 14. The handle guard M is typically disposed below and slightly distally of the butt N.

[0004] Thus, it can be seen from the chef's knife 10, that a user is encouraged to keep their hand between the handle guard M and the bolster F, based on the shape of the knife 10. However, cooking professionals, such as chefs, often grip a knife partially forward of the bolster F. Holding the knife in such a manner allows the cooking professional to better control the blade portion 12. Many non-professionals do not realize that a knife can be held in such a manner, or are afraid to hold a knife in such a manner for fear of being cut. Additionally, for some applications, such as chopping of food products, it may be beneficial to use both hands on the knife, one located on the blade portion and the other on the handle portion. Therefore, a need exists for a chopping attachment that may be utilized to position a user's hand on a blade portion of a knife when food products are being chopped.



**SUMMARY**

[0005] According to one embodiment, a knife for cutting food products comprises a blade portion, a handle portion, and a bolster. The blade portion has a cutting edge and a spine. The spine is disposed on a top side of the blade portion and generally opposed to the cutting edge. The handle portion is disposed proximal of the blade portion. The bolster has at least a first thickness and is positioned between the blade portion and the handle portion. The bolster comprises a first generally curved-shape proximal boundary and a second generally curved-shaped distal boundary. The bolster has a first lateral sidewall and a second lateral sidewall. A surface depression is disposed between the first generally curved-shape proximal boundary and the second generally curved-shape distal boundary of at least one of the first lateral sidewall and the second lateral sidewall. The first generally curved-shape proximal boundary is spaced a distance from the second generally curved-shape distal boundary to receive a thumb of a user on the bolster.

[0006] According to another embodiment, a knife for cutting comprises a blade portion, a handle portion, and a bolster. The blade portion has a cutting edge and a spine. The spine is disposed on a top side of the blade portion and generally opposed to the cutting edge. The handle portion is disposed proximal of the blade portion. The bolster has at least a first thickness and is positioned between the blade portion and the handle portion. The bolster comprises a first proximal boundary and a second distal boundary. The bolster has a first lateral sidewall and a second lateral sidewall. A surface depression is disposed between the first proximal boundary and the second distal boundary of at least one of the first lateral sidewall and the second lateral sidewall. The first proximal boundary is spaced a distance from the second distal boundary to receive a thumb of a user on the bolster.

[0007] According to one process, a method of grasping a knife for slicing is provided. The knife has a blade portion, a handle portion, and a bolster positioned between the blade



portion and the handle portion. The bolster has a generally arc shape and a generally blunt bottom surface. A thumb of a first hand is placed on a first side of a bolster. An index finger of the first hand is placed on a second side of the bolster. The second side of the bolster is opposite of the first side of the bolster. The index finger contacts a blunt surface of the bolster. At least one of the remaining fingers of the first hand wraps around a handle portion of the knife.

[0008] According to yet another embodiment, a knife and chopping attachment assembly for chopping food products comprises a knife and a chopping attachment. The knife has a blade portion and a handle portion. The blade portion has a cutting edge and a spine disposed on a top side of the blade portion generally opposite the cutting edge. The chopping attachment is disposed over a portion of the spine of the knife. The chopping attachment is movable along the spine from a proximal end of the blade portion to a distal end of the blade portion.

[0009] According to yet a further embodiment, a chopping attachment for a knife comprises a first sidewall, a second sidewall, and a connecting wall. The second sidewall is laterally spaced apart from the first sidewall. The connecting wall is attached to the first sidewall and the second sidewall. The connecting wall controls a distance the second sidewall is laterally spaced apart from the first sidewall. A gap exists between the first and second sidewall. The gap is adapted to receive a portion of a spine of a knife.

[0010] According to another process, a method of using a knife and chopping attachment assembly for chopping a product, the knife having a blade portion with a cutting edge, a point, and a spine, a handle portion, and a bolster positioned between the blade portion and the handle portion is provided. A chopping attachment is positioned over a portion of a spine of a blade portion of the knife between a point and a bolster. The chopping attachment is held with a first hand. A handle portion of the knife is held with a second hand.



The knife and chopping attachment assembly are rocked to chop material located beneath the cutting edge of the blade portion.

#### **BRIEF DESCRIPTION OF DRAWINGS**

[0011] To understand the present disclosure, it will now be described by way of example, with reference to the accompanying Appendix containing drawings in which:

[0012] FIG. 1 is a side view of a prior art knife;

[0013] FIG. 2 is a side view of a knife according to one embodiment;

[0014] FIG. 3 is a side view the knife of FIG. 2 being held in a first position;

[0015] FIG. 4 is a side view of the knife of FIG. 2 being held in a second position;

[0016] FIG. 5 is a side view of the knife of FIG. 2 being held in a third position;

handle according to one embodiment;

[0017] FIG. 6 is a side view of a knife according to another embodiment;

[0018] FIG. 7 is a side view of the knife of FIG. 6 being held in a first position;

[0019] FIG. 8 is a side view of the knife of FIG. 6 being held in a second position;

[0020] FIG. 9 is a side view of a knife according to a further embodiment;

[0021] FIG. 10 is a side view of the knife of FIG. 9 being held in a first position;

[0022] FIG. 11 is a side view of the knife of FIG. 9 being held in a second position;

[0023] FIG. 12 is a side view of a knife according to yet another embodiment;

[0024] FIG. 13 is a side view of the knife of FIG. 12 being held in a first position;

[0025] FIG. 14 is a side view of the knife of FIG. 12 being held in a second position;

[0026] FIG. 15 is a side view of the knife and chopping attachment assembly with the chopping assembly in a first position; and

[0027] FIG. 16 is a side view of the knife and chopping attachment assembly with the chopping assembly in a second position.



**DETAILED DESCRIPTION**

[0028] While this disclosure is susceptible of embodiments in many different forms, there is shown in the drawings and will herein be described in detail preferred examples of the disclosure with the understanding that the present disclosure is to be considered an exemplification of the principles contained herein and is not intended to limit the broad aspects disclosed to the examples illustrated.

[0029] Referring now to FIG. 2, a knife 20 is shown. The knife 20 is in the form of a chef's knife. The knife 20 has a blade portion 22 and a handle portion 24. The blade portion 22 has a point 26 located at a distal end of the blade portion 22. The blade portion 22 additionally has a tip region 28. The tip region 28 is curved to allow a user to perform more delicate cutting operations. The blade portion 22 further comprises a cutting edge 30 on a first side of the blade portion. The cutting edge 30 is a sharpened cutting surface utilized to cut food products being prepared by the user. The cutting edge 30 runs from the point 26 to a heel 32. The heel 32 is located generally at a proximal end of the blade portion 22.

[0030] The blade portion 22 additionally comprises a spine 34. The spine 34 extends along the blade portion 22 on a generally opposite side of the cutting edge 30. The spine 34 provides structural rigidity and weight to the blade portion 22.

[0031] The knife 20 additionally has a bolster 36. The bolster 36 marks a transition between the blade portion 22 and the handle portion 24. The bolster 36 as shown in FIG. 2 has an arc shape or curved shape that resembles an inverted "L." The bolster 36 has a distal boundary 36a and a proximal boundary 36b. The distal boundary 36a has an arcuate shape or a curved shape, and the proximal boundary 36b additionally has an arcuate shape or a curved shape that provides the bolster 36 with the arcuate shape or curved shape.

[0032] The bolster 36 additionally has a surface depression 37 formed in at least one of a first lateral sidewall or a second lateral sidewall of the bolster 36. The surface depression 37



reduces the thickness of a portion of the bolster 36 and provides a visual cue to the user as to where to position a finger on the bolster. The depression 37 additionally assists the user in maintaining a grip on the bolster 36.

[0033] The arc shape or curved shape of the bolster 36 encourages a user to position their thumb and forefinger on the bolster 36. The shape of the bolster 36 naturally positions a person's thumb and index finger to a "pinch" grip as shown in FIG. 3. By holding the knife 20 with a "pinch" grip, a user may better control the blade portion 22, as the user is gripping the knife closer to the blade portion 22. The "pinch" grip is well suited for activities such as slicing vegetables, slicing fruits, slicing meats, and other activities where control of the blade portion 22 is desired. The bolster 36 is disposed nearer the distal end of the knife 20, *i.e.*, nearer the point 26 of the blade portion 22, than the bolster F of the conventional knife 10 of FIG. 1.

[0034] The knife 20 comprises a finger guard 38. The finger guard 38 protrudes transversely from the blade portion at a distal end of the bolster 36. The finger guard 38 is provided to help prevent a user's hand from slipping onto the blade portion 22. The finger guard 38 has a generally identical arc shape or curve shape that resembles an inverted "L" as the bolster 36. The finger guard 38 additionally provides a visual indication to a user that it is acceptable to position their hand closer to the blade portion 22. The finger guard 38 is disposed nearer the distal end of the knife 20, *i.e.*, nearer the point 26 of the blade portion 22, than the finger guard G of the conventional knife 10 of FIG. 1.

[0035] The bolster 36 additionally has a blunt edge 40. The blunt edge 40 is offset a distance O from the edge 30 of the knife 20. The offset O is selected such that a user's index finger may contact the blunt edge 40, rather than the cutting edge 30, reducing the likelihood of a user cutting their finger while using a "pinch" grip as shown in FIG. 3.

[0036] It is contemplated that the thickness of the bolster 36 may vary from the handle portion 24 towards the blade portion 22, with the thickness of the bolster being greatest near the



handle portion 24, and thinnest near the blade portion 22 or the blunt edge 40. The thinning of the bolster 36 encourages a user to place their thumb and index finger on the bolster 36 to form a “pinch” grip.

[0037] It is further contemplated that the bolster 36 may be provided with recesses, not shown, to provide a user with a more certain location to place their thumb and index finger on the bolster 36. The user would place their thumb in a recess on a first lateral side of the bolster 36, and their index finger in a recess on an opposite side of the bolster 36.

[0038] The handle portion 24 of the knife 20 has a tang 42 that is made from the same material as the blade portion 22. The tang 42 has a grip 44 attached thereto. The grip 44 may be attached to the tang 42 in a variety of manners, such as through the use of fasteners, via an adhesive, or other known connecting mechanisms. The grip 44 may be formed of a variety of materials that provide a user with enhanced grip, such as polymeric materials, silicone, rubber, and the like. It is additionally contemplated that a grip and a tang may be a single piece of metal, thus making an entire knife from one piece of metal. The handle portion 24 terminates in a butt 46 at a proximal end of the knife 20.

[0039] As previously mentioned above, FIG. 3 shows the knife 20 being held in “pinch” grip by a user. In a “pinch” grip, the user places their thumb on one side of the bolster 36 and their index finger on the other side of bolster 36, thereby “pinching” the knife 20 between their thumb and index finger. The remainder of the user’s hand wraps around the grip 44 and the tang 42 of the handle portion 24. Thus, the user’s hand is positioned closer to the blade portion 22 than the conventional knife 10 contemplates assuming the user positions their hand toward the handle portion 12 side of the bolster F and finger guard G. Positioning a user’s hand closer to the blade portion 22 allows a user to have better control of the knife 20 and use the knife 20 in a more precise manner when slicing and cutting objects.



[0040] FIG. 4 shows a user's hand with a "grasp" type grip of the knife 20. In a "grasp" grip, the user places their thumb on one side of the bolster 36, and wraps their fingers around the handle portion 24 of the knife 20. The "grasp" grip is how many non-professionals typically hold a knife. A grasp grip is useful for chopping materials with the knife 20. Even when utilizing the "grasp" type grip shown in FIG. 4, the user's hand is still closer to the blade portion 22 than a similar grip would provide on the conventional knife 10. Hence, the user will again be better able to control the blade portion 22 of the knife 20 when using a "grasp" type grip.

[0041] FIG. 5 shows a "pare" type grip. A "pare" type grip is utilized most typically when a user is performing a peeling type task, such as peeling the skin from an apple or carrot, or other similar cutting operations. In the "pare" type grip the user's thumb contacts the bolster 36, while the user's index finger extends along the spine 34 of the knife 20. The remainder of the user's fingers are wrapped around the handle portion 24 of the knife 20. The extension of the user's index finger along the spine 34 stabilizes the movement of the blade portion 24. The positioning of the thumb on the bolster 36 provides enhanced stability of the knife 20 relative to the conventional knife 10, as the user's thumb is closer to the blade portion 22, thereby giving the user more control over the blade portion 22.

[0042] Referring next to FIG. 6, a knife 60 is shown. The knife 60 is in the form of a steak knife. The knife 60 has a blade portion 62 and a handle portion 64. The blade portion 62 has a point 66 located at a distal end of the blade portion 62. The blade portion 62 additionally has a tip region 68. The tip region 68 is curved to allow a user to perform more delicate cutting operations. The blade portion 62 further comprises a cutting edge 70 on a first side of the blade portion 62. The cutting edge 70 is a sharpened cutting surface utilized to cut food products being prepared by the user. The cutting edge 70 runs from the point 66 to a heel 72. The heel 72 is located generally at a proximal end of the blade portion 62.



[0043] The blade portion 62 additionally comprises a spine 74. The spine 74 extends along the blade portion 62 on a generally opposite side of the cutting edge 70. The spine 74 provides structural rigidity and weight to the blade portion 62.

[0044] The knife 60 additionally has a bolster 76. The bolster 76 marks a transition between the blade portion 62 and the handle portion 64. The bolster 76 as shown in FIG. 2 has an arcuate shape or curved shape that resembles an inverted “L.” The bolster 76 has a distal boundary 76a and a proximal boundary 76b. The distal boundary 76a has an arcuate shape or a curved shape, and the proximal boundary additionally has an arcuate shape or a curved shape that provides the bolster 76 with the arcuate shape or curved shape.

[0045] The bolster 76 additionally has a surface depression 77 formed in at least one of a first lateral sidewall or a second lateral sidewall of the bolster 76. The surface depression 77 reduces the thickness of a portion of the bolster 76 and provides a visual cue to the user as to where to position a finger on the bolster. The depression 77 additionally assists the user in maintaining a grip on the bolster 76.

[0046] The arcuate shape or curved shape of the bolster 76 additionally encourages a user to position their thumb on the bolster 76. The shape of the bolster 76 naturally positions a user's thumb and index finger to a “grasp” grip as shown in FIG. 7. By holding the knife 60 with a “grasp” grip, a user may better control the blade portion 62, as the user is gripping the knife closer to the blade portion 62. The bolster 76 is disposed nearer the distal end of the knife 60, *i.e.*, nearer the point 66 of the blade portion 62, than the bolster F of the conventional knife 10 of FIG. 1.

[0047] The knife 60 comprises a finger guard 78. The finger guard 78 protrudes transversely from the blade portion 62 at a distal end of the bolster 76. The finger guard 78 is provided to help prevent a user's hand from slipping onto the blade portion 72. The finger guard 78 has a generally identical arc shape or curve shape that resembles an inverted “L” as



the bolster 76. The finger guard 78 additionally is provided to provide a visual indication to a user that it is acceptable to position their hand closer to the blade portion 62. The finger guard 78 is disposed nearer the distal end of the knife 60, *i.e.*, nearer the point 66 of the blade portion 62, than the finger guard G of the conventional knife 10 of FIG. 1.

[0048] The bolster 76 additionally has a blunt edge 80. The blunt edge 80 is provided so that a user's index finger may contact the blunt edge 80, rather than the cutting edge 70, reducing the likelihood of a user cutting their finger while using a "grasp" grip as shown in FIG. 7.

[0049] It is contemplated that the thickness of the bolster 76 may vary from the handle portion 64 towards the blade portion 62, with the thickness of the bolster 76 being greatest near the handle portion 64, and thinnest near the blade portion 62 or the blunt edge 80. The thinning of the bolster 76 encourages a user to place their thumb on the bolster 76.

[0050] It is further contemplated that the bolster 76 may be provided with recesses, not shown, to provide a user with a more certain location to place their thumb on the bolster 76. The user would place their thumb in a recess on a first lateral side of the bolster 76.

[0051] The handle portion 64 of the knife 60 has a tang 82 that is made from the same material as the blade portion 62. The tang 82 has a grip 84 attached thereto. The grip 84 may be attached to the tang 82 in a variety of manners, such as through the use fasteners, via an adhesive, or other known connecting mechanisms. The grip 84 may be formed of a variety of materials that provide a user with enhanced grip, such as polymeric materials, silicone, rubber, and the like. It is additionally contemplated that a grip and a tang may be a single piece of metal, thus making an entire knife from one piece of metal. The handle portion 64 terminates in a butt 86 at a proximal end of the knife 60.

[0052] FIG. 7 shows a user's hand with a "grasp" type grip of the knife 60. In a "grasp" grip, the user places their thumb on one side of the bolster 76, and wraps their fingers around the



handle portion 64 of the knife 60. The “grasp” grip is how many non-professionals typically hold a knife. A grasp grip is useful for chopping and slicing materials with the knife 60. Even when utilizing the “grasp” type grip shown in FIG. 7, the user’s hand is still closer to the blade portion 62 than a similar grip would provide on the conventional knife 10. Hence, the user will again be better able to control the blade portion 62 of the knife 60 when using a “grasp” type grip.

[0053] FIG. 8 shows a “pare” type grip. A “pare” type grip is utilized most typically when a user is performing a more precise task, such as cutting meat away from a bone, or other similar cutting operations. In the “pare” type grip the user’s thumb contacts the bolster 76, while the user’s index finger extends along the spine 74 of the knife 60. The remainder of the user’s fingers are wrapped around the handle portion 64 of the knife 60. The extension of the user’s index finger along the spine 74 stabilizes the movement of the blade portion 62. The positioning of the thumb on the bolster 76 provides enhanced stability of the knife 60 relative to the conventional knife 10, as the user’s thumb is closer to the blade portion 62, thereby giving the user more control over the blade portion 62.

[0054] FIG. 9 shows a knife 120. The knife 120 is in the form of a paring knife. The knife 120 has a blade portion 122 and a handle portion 124. The blade portion 122 has a point 126 located at a distal end of the blade portion 122. The blade portion 122 additionally has a tip region 128. The tip region 128 is curved to allow a user to perform more delicate cutting operations. The blade portion 122 further comprises a cutting edge 130 on a first side of the blade portion. The cutting edge 130 is a sharpened cutting surface utilized to cut food products being prepared by the user. The cutting edge 130 runs from the point 126 to a heel 132. The heel 132 is located generally at a proximal end of the blade portion 122.



**[0055]** The blade portion 122 additionally comprises a spine 134. The spine 134 extends along the blade portion 122 on a generally opposite side of the cutting edge 130. The spine 134 provides structural rigidity and weight to the blade portion 122.

**[0056]** The knife 120 additionally has a bolster 136. The bolster 136 marks a transition between the blade portion 122 and the handle portion 124. The bolster 136 as shown in FIG. 9 has an arc shape or curved shape that resembles an inverted "L." The bolster 136 has a distal boundary 136a and a proximal boundary 136b. The distal boundary 136a has an arcuate shape or a curved shape, and the proximal boundary 136b additionally has an arcuate shape or a curved shape that provides the bolster 136 with the arcuate shape or curved shape.

**[0057]** The bolster 136 additionally has a surface depression 137 formed in at least one of a first lateral sidewall or a second lateral sidewall of the bolster 136. The surface depression 137 is disposed between the proximal boundary 136b and the distal boundary 136a of at least one of the first lateral sidewall and the second lateral sidewall. The proximal boundary 136b is spaced a distance from the distal boundary 136a along a length of the knife 120. Further, the proximal boundary 136b is spaced the distance from the distal boundary 136a at an edge of the bolster 136 corresponding to the cutting edge 130 of the blade portion 122. Also, the proximal boundary 136b is spaced the distance from the distal boundary 136a at a distance sufficient to receive a thumb of a user of the knife 120 on the bolster 136. The surface depression 137 reduces the thickness of a portion of the bolster 136 and provides a visual cue to the user as to where to position a finger on the bolster. The depression 137 additionally assists the user in maintaining a grip on the bolster 136.

**[0058]** The arcuate shape or curved shape of the bolster 136 encourages a user to position their thumb on the bolster 136. The bolster 136 is disposed nearer the distal end of the knife 120, *i.e.*, nearer the point 126 of the blade portion 122, than the bolster F of the conventional knife 10 of FIG. 1.



[0059] The knife 120 comprises a finger guard 138. The finger guard 138 protrudes transversely from the blade portion at a distal end of the bolster 136. The finger guard 138 is provided to help prevent a user's hand from slipping onto the blade portion 122. The finger guard 138 has a generally identical arc shape or curve shape that resembles an inverted "L" as the bolster 136. The finger guard 138 additionally provides a visual indication to a user that it is acceptable to position their hand closer to the blade portion 122. The finger guard 138 is



disposed nearer the distal end of the knife 120, *i.e.*, nearer the point 126 of the blade portion 122, than the finger guard G of the conventional knife 10 of FIG. 1.

[0060] The bolster 136 additionally has a blunt edge 140, reducing the likelihood of a user cutting their finger.

[0061] It is contemplated that the thickness of the bolster 136 may vary from the handle portion 124 towards the blade portion 122, with the thickness of the bolster being greatest near the handle portion 124, and thinnest near the blade portion 122 or the blunt edge 140. The thinning of the bolster 136 encourages a user to place their thumb on the bolster 136.

[0062] It is further contemplated that the bolster 136 may be provided with recesses, not shown, to provide a user with a more certain location to place their thumb on the bolster 136. The user would place their thumb in a recess on a first lateral side of the bolster 136.

[0063] The handle portion 124 of the knife 120 has a tang 142 that is made from the same material as the blade portion 122. The tang 142 has a grip 144 attached thereto. The grip 144 may be attached to the tang 142 in a variety of manners, such as through the use of fasteners, via an adhesive, or other known connecting mechanisms. The grip 144 may be formed of a variety of materials that provide a user with enhanced grip, such as polymeric materials, silicone, rubber, and the like. It is additionally contemplated that a grip and a tang may be a single piece of metal, thus making an entire knife from one piece of metal. The handle portion 124 terminates in a butt 146 at a proximal end of the knife 120.

[0064] FIG. 10 shows a user's hand with a "grasp" type grip of the knife 120. In a "grasp" grip, the user places their thumb on one side of the bolster 136, and wraps their fingers around the handle portion 124 of the knife 120. The "grasp" grip is how many non-professionals typically hold a knife. A grasp grip is useful for chopping materials with the knife 120. Even when utilizing the "grasp" type grip shown in FIG. 10, the user's hand is still closer to the blade portion 122 than a similar grip would provide on the conventional knife 10. Hence,



the user will again be better able to control the blade portion 122 of the knife 120 when using a “grasp” type grip.

[0065] FIG. 11 shows a “pare” type grip. A “pare” type grip is utilized most typically when a user is performing a peeling type task, such as peeling the skin from an apple or carrot, or other similar cutting operations. In the “pare” type grip the user’s thumb contacts the bolster 136, while the user’s index finger extends along the spine 134 of the knife 120. The remainder of the user’s fingers are wrapped around the handle portion 124 of the knife 120. The extension of the user’s index finger along the spine 134 stabilizes the movement of the blade portion 122. The positioning of the thumb on the bolster 136 provides enhanced stability of the knife 120 relative to the conventional knife 10, as the user’s thumb is closer to the blade portion 122, thereby giving the user more control over the blade portion 122.

[0066] Finally, FIG. 12 shows a knife 220. The knife 220 is in the form of a bread knife. The knife 220 has a blade portion 222 and a handle portion 224. The blade portion 222 has a point 226 located at a distal end of the blade portion 222. The blade portion 222 additionally has a tip region 228. The tip region 228 is curved to allow a user to perform more delicate cutting operations. The blade portion 222 further comprises a cutting edge 230 on a first side of the blade portion. The cutting edge 230 is a sharpened cutting surface utilized to cut food products being prepared by the user. The cutting edge 230 runs from the point 226 to a heel 232. The heel 232 is located generally at a proximal end of the blade portion 222. As shown in FIG. 12, the cutting edge 230 is a serrated cutting edge.

[0067] The blade portion 222 additionally comprises a spine 234. The spine 234 extends along the blade portion 222 on a generally opposite side of the cutting edge 230. The spine 234 provides structural rigidity and weight to the blade portion 222.

[0068] The knife 220 additionally has a bolster 236. The bolster 236 marks a transition between the blade portion 222 and the handle portion 224. The bolster 236 as shown in FIG. 12



has an arc shape or curved shape that resembles an inverted “L.” The bolster 236 has a distal boundary 236a and a proximal boundary 236b. The distal boundary 236a has an arcuate shape or a curved shape, and the proximal boundary 236b additionally has an arcuate shape or a curved shape that provides the bolster 236 with the arcuate shape or curved shape.

[0069] The bolster 236 additionally has a surface depression 237 formed in at least one of a first lateral sidewall or a second lateral sidewall of the bolster 236. The surface depression 237 reduces the thickness of a portion of the bolster 236 and provides a visual cue to the user as to where to position a finger on the bolster. The depression 237 additionally assists the user in maintaining a grip on the bolster 236.

[0070] The arcuate shape or curved shape of the bolster 236 encourages a user to position their thumb on the bolster 236. The bolster 236 is disposed nearer the distal end of the knife 220, *i.e.*, nearer the point 226 of the blade portion 222, than the bolster F of the conventional knife 10 of FIG. 1.

[0071] The knife 220 comprises a finger guard 238. The finger guard 238 protrudes transversely from the blade portion at a distal end of the bolster 236. The finger guard 238 is provided to help prevent a user's hand from slipping onto the blade portion 222. The finger guard 238 has a generally identical arc shape or curve shape that resembles an inverted “L” as the bolster 236. The finger guard 238 additionally provides a visual indication to a user that it is acceptable to position their hand closer to the blade portion 222. The finger guard 238 is disposed nearer the distal end of the knife 220, *i.e.*, nearer the point 126 of the blade portion 122, than the finger guard G of the conventional knife 10 of FIG. 1.

[0072] The bolster 236 additionally has a blunt edge 240. The blunt edge 240 is offset a distance P from the cutting edge 230. The distance P is selected to allow a user to grasp the handle portion 224 and not have their hand contact a surface where bread, or another item being cut, is located. The blunt edge 240 reduces the likelihood of a user cutting their finger.



[0073] It is contemplated that the thickness of the bolster 236 may vary from the handle portion 224 towards the blade portion 222, with the thickness of the bolster being greatest near the handle portion 224, and thinnest near the blade portion 222 or the blunt edge 240. The thinning of the bolster 236 encourages a user to place their thumb on the bolster 236.

[0074] It is further contemplated that the bolster 236 may be provided with recesses, not shown, to provide a user with a more certain location to place their thumb on the bolster 236. The user would place their thumb in a recess on a first lateral side of the bolster 236.

[0075] The handle portion 224 of the knife 220 has a tang 242 that is made from the same material as the blade portion 222. The tang 242 has a grip 244 attached thereto. The grip 244 may be attached to the tang 242 in a variety of manners, such as through the use of fasteners, via an adhesive, or other known connecting mechanisms. The grip 244 may be formed of a variety of materials that provide a user with enhanced grip, such as polymeric materials, silicone, rubber, and the like. It is additionally contemplated that a grip and a tang may be a single piece of metal, thus making an entire knife from one piece of metal. The handle portion 224 terminates in a butt 246 at a proximal end of the knife 220.

[0076] FIG. 13 shows a user's hand with a "grasp" type grip of the knife 220. In a "grasp" grip, the user places their thumb on one side of the bolster 236, and wraps their fingers around the handle portion 224 of the knife 220. The "grasp" grip is how many non-professionals typically hold a knife. A grasp grip is useful for chopping materials with the knife 220. Even when utilizing the "grasp" type grip shown in FIG. 13, the user's hand is still closer to the blade portion 222 than a similar grip would provide on the conventional knife 10. Hence, the user will again be better able to control the blade portion 222 of the knife 220 when using a "grasp" type grip.

[0077] FIG. 14 shows a "pare" type grip. In the "pare" type grip the users thumb contacts the bolster 236, while the user's index finger extends along the spine 234 of the knife



220. The remainder of the user's fingers are wrapped around the handle portion 224 of the knife 220. The extension of the user's index finger along the spine 234 stabilizes the movement of the blade portion 224. The positioning of the thumb on the bolster 236 provides enhanced stability of the knife 220 relative to the conventional knife 10, as the user's thumb is closer to the blade portion 222, thereby giving the user more control over the blade portion 222.

[0078] FIG. 15 shows a knife and chopping attachment assembly 300 that comprises the knife 20 of FIGs. 2-5, and a chopping attachment 310. The chopping attachment 310 is removably secured over the spine 34 of the blade portion 22 of the knife 20. The chopping attachment may be secured to the blade portion 24 in a variety of ways, such as through a magnet within the chopping attachment 310 that is attracted to a metal blade portion 22, via a press-fit over the spine 34 of the blade portion 22, or the chopping attachment 310 may be attached to a groove in the blade portion of a knife (not shown in FIG. 15). The chopping attachment 310 is moveable in the direction shown by arrow Q of FIG. 16 along the spine 34 from an area near the bolster 36, as shown in FIG. 15, to an area near the point 26 of the knife 20. The chopping attachment 310 may be positioned at any intermediate position along the spine 34, depending on the size of a material being chopped. For instance, if a small sized material is being chopped, the chopping attachment 310 may be positioned nearer the bolster 36, while when a large sized material is being chopped, the chopping attachment 310 may be positioned nearer the point 26.

[0079] Once the chopping attachment 310 is positioned, a user may grasp the bolster 36 and the handle portion 24 with a first hand, and the chopping attachment 310 with a second hand. The user may then rock the knife and chopping attachment assembly 300 back and forth to chop the material. The use of both hands on the knife and chopping attachment assembly provides a user with greater control over the chopping of the material. Additionally, the chopping attachment 310 provides the user with a more comfortable grip than simply grabbing



the blade portion 22. Further, the chopping attachment 310 may be made, at least partially, from a material that is slip resistant, thereby further enhancing the grip of the user on the knife and chopping attachment assembly 300.

**[0080]** The chopping attachment has a first sidewall 312, and a second generally identical sidewall (not shown) that are connected via a connecting wall 314. The connecting wall 314 has a length that determines a lateral distance between the first sidewall 312 and the second sidewall. The greater the length of the connecting wall 314, the greater the distance between the first sidewall 312 and the second sidewall. The lateral distance between the first sidewall 312 and the second sidewall forms an opening that receives a portion of the blade portion 22 of the knife 20 adjacent the spine 34. A magnet can be disposed in one or both of the first sidewall 312 and the second sidewall. Some combination of magnetic force, a press fit, or both may be utilized to removably secure the chopping attachment 310 to the blade portion 22 of the knife 20.

**[0081]** The chopping attachment 310 may be formed from a variety of polymeric materials, such as TPE, and may include a magnet within the chopping attachment 310. The magnet within the chopping attachment 310 allows the chopping attachment 310 to be removably connected to a knife 20 having a ferrous blade, such as stainless steel. The strength of the magnet is selected to allow the chopping attachment 310 to be held in place on the knife 20, but is weak enough that a user may move, or remove, the chopping attachment 310. The magnet may be press-fit, or snap-fit, into a body of the chopping attachment 310, or may have the body of the chopping attachment 310 formed around the magnet in a molding process.



**CLAIMS****What is claimed is:**

1. A knife and chopping attachment assembly comprising:
  - a blade portion having a cutting edge and a spine, the spine being disposed on a top side of the blade portion and generally opposed to the cutting edge;
  - a handle portion disposed proximal of the blade portion;
  - characterized by
    - a bolster having at least a first thickness positioned between the blade portion and the handle portion, the bolster comprising:
      - a first generally curved-shape proximal boundary and a second generally curved-shaped distal boundary;
      - a first lateral sidewall and a second lateral sidewall;
      - a surface depression disposed between the first generally curved-shape proximal boundary and the second generally curved-shape distal boundary of at least one of the first lateral sidewall and the second lateral sidewall, the first generally curved-shape proximal boundary being spaced a distance from the second generally curved-shape distal boundary (i) along a length of the knife, (ii) at an edge of the bolster corresponding to the cutting edge of the blade portion, and (iii) a distance sufficient to receive a thumb of a user on the bolster;
      - a finger guard formed by the second generally curve-shaped distal boundary protruding transversely from the blade portion; and
      - a chopping attachment disposed in slidable engagement with the spine of the knife, the chopping attachment being slidable along the spine between a position proximate a proximal end of the blade portion toward a distal end of the blade portion.
2. The knife and chopping attachment assembly of claim 1, wherein the chopping attachment is removably mounted to the blade portion.



3. The knife and chopping attachment assembly of claim 1, wherein the chopping attachment is magnetically coupled to the blade portion.
4. The knife and chopping attachment assembly of claim 1, wherein the chopping attachment is coupled to the blade portion via a friction fit.
5. The knife and chopping attachment assembly of claim 1, wherein the chopping attachment may be positioned to a plurality of predetermined locations along the spine of the blade portion of the knife.
6. The knife and chopping attachment assembly of claim 1, wherein the chopping attachment comprises a polymeric material.
7. A knife for cutting food products comprising:
  - a blade portion having a cutting edge and a spine, the spine being disposed on a top side of the blade portion and generally opposed to the cutting edge;
  - a handle portion disposed proximal of the blade portion;
  - characterized by
    - a bolster having at least a first thickness positioned between the blade portion and the handle portion, the bolster comprising:
      - a first generally curved-shape proximal boundary and a second generally curved-shaped distal boundary;
      - a first lateral sidewall and a second lateral sidewall;
      - a surface depression disposed between the first generally curved-shape proximal boundary and the second generally curved-shape distal boundary of at least one of the first lateral sidewall and the second lateral sidewall, the first generally curved-shape



proximal boundary being spaced a distance from the second generally curved-shape distal boundary (i) along a length of the knife, (ii) at an edge of the bolster corresponding to the cutting edge of the blade portion, and (iii) a distance sufficient to receive a thumb of a user on the bolster; and

a finger guard formed by the second generally curve-shaped distal boundary protruding transversely from the blade portion.

8. The knife of claim 7, wherein the thickness of the bolster varies between the blade portion and the handle portion.

9. The knife of claim 8, wherein the bolster is thinner nearer the blade portion.

10. The knife of claim 7 further comprising a blunt edge, the blunt edge disposed proximally to the cutting edge of the blade portion.

11. The knife of claim 10, wherein the blunt edge is offset a vertical distance from the blade portion.

12. The knife of claim 7, wherein the handle portion comprises a tang.

13. The knife of claim 12, wherein the handle portion additionally comprises a grip attached to the tang.

14. The knife of claim 12, wherein the tang and the blade portion are formed from a single piece.

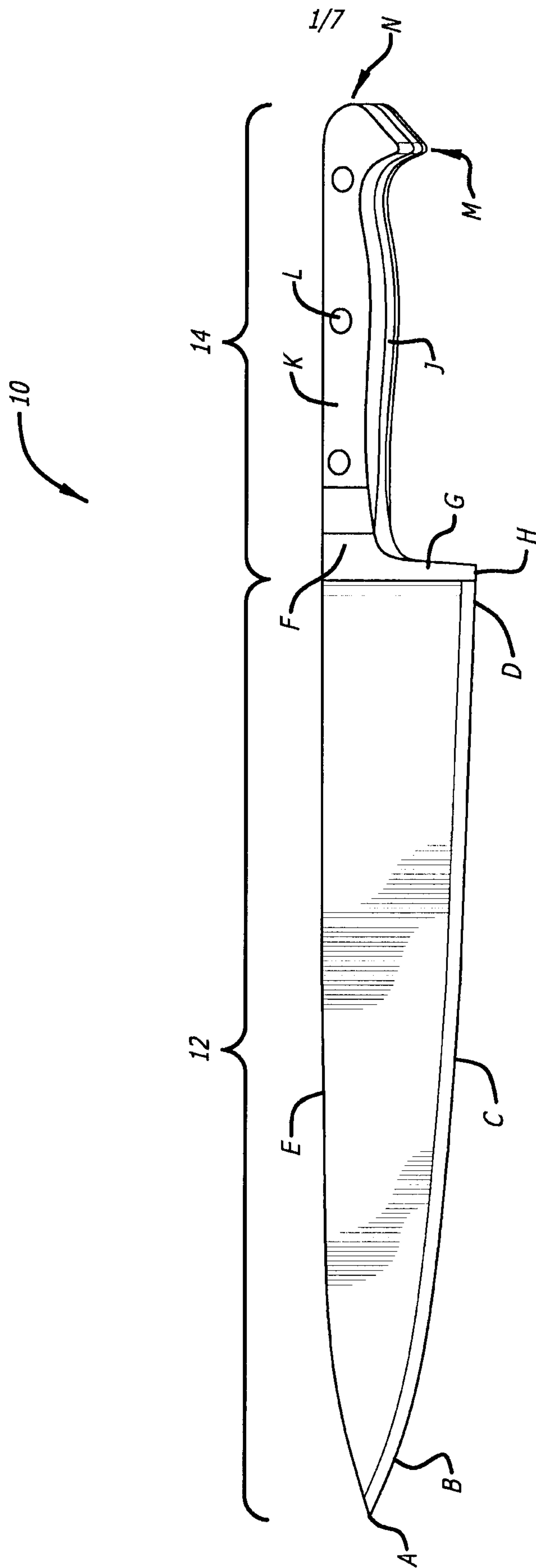


15. The knife of claim 7, wherein the second generally curved-shape of the bolster is shaped as an inverted “L”.

16. The knife of claim 7, wherein the bolster is additionally adapted to receive an index finger of a user on a side of the bolster opposite the user’s thumb.

17. The knife of claim 7, wherein the cutting edge is serrated.

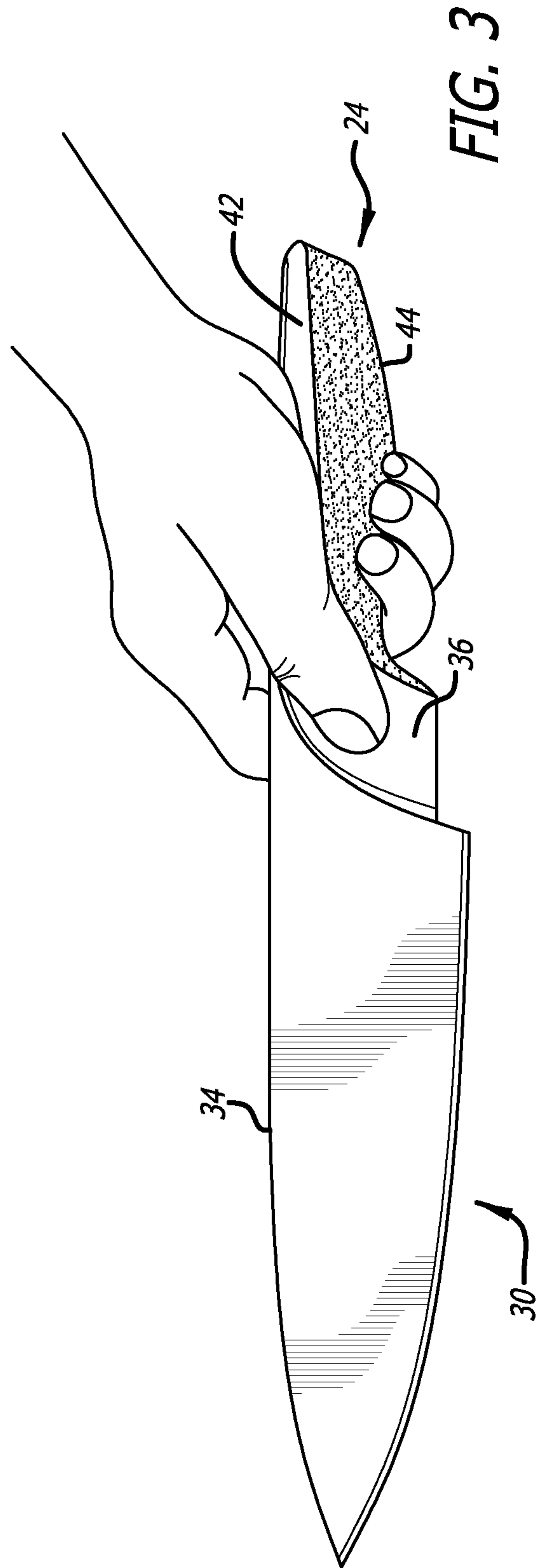
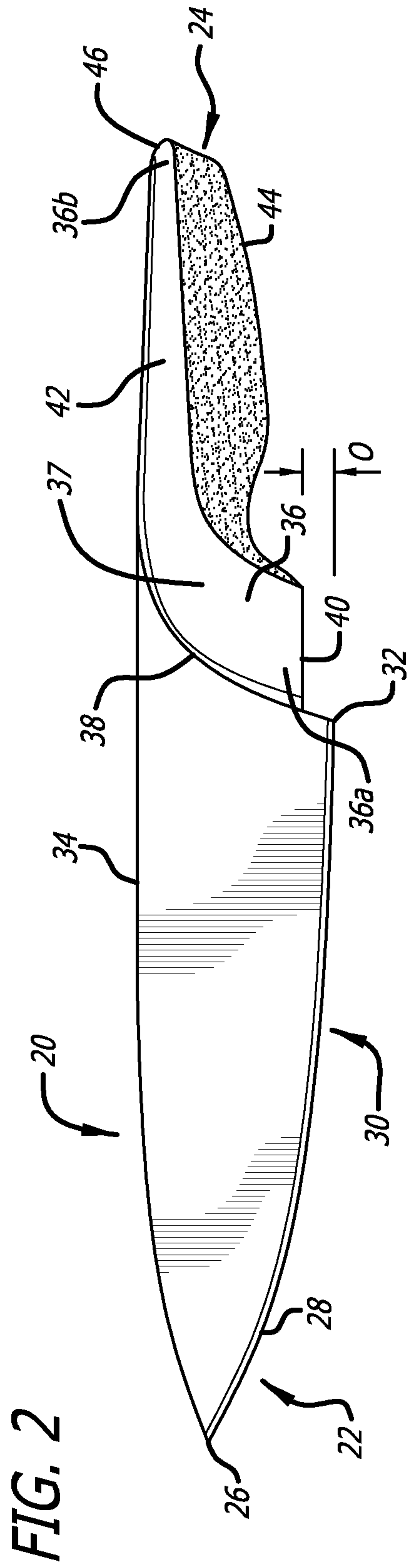




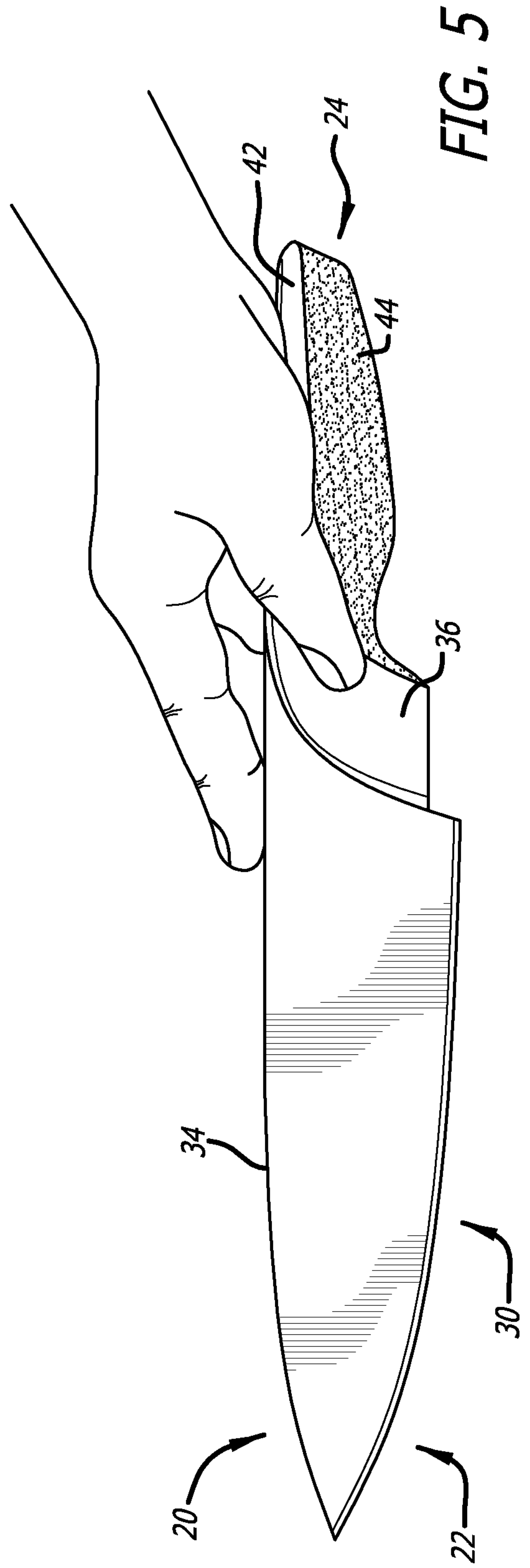
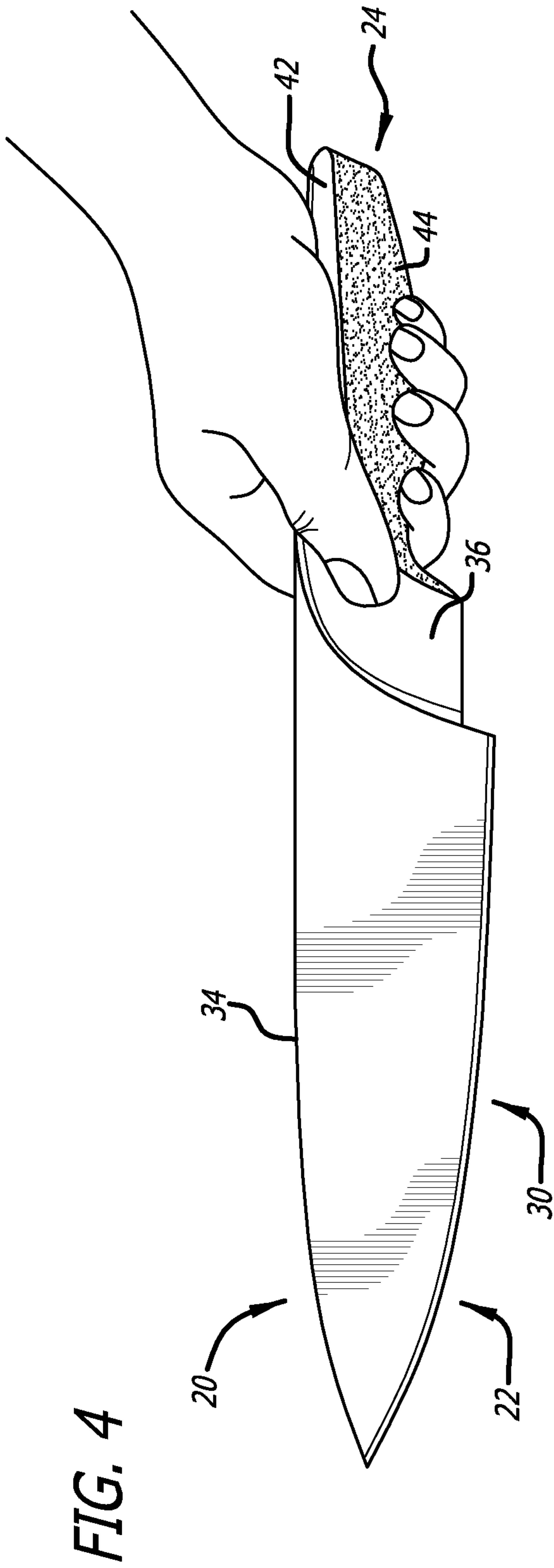
**FIG. 1**

## PRIOR ART



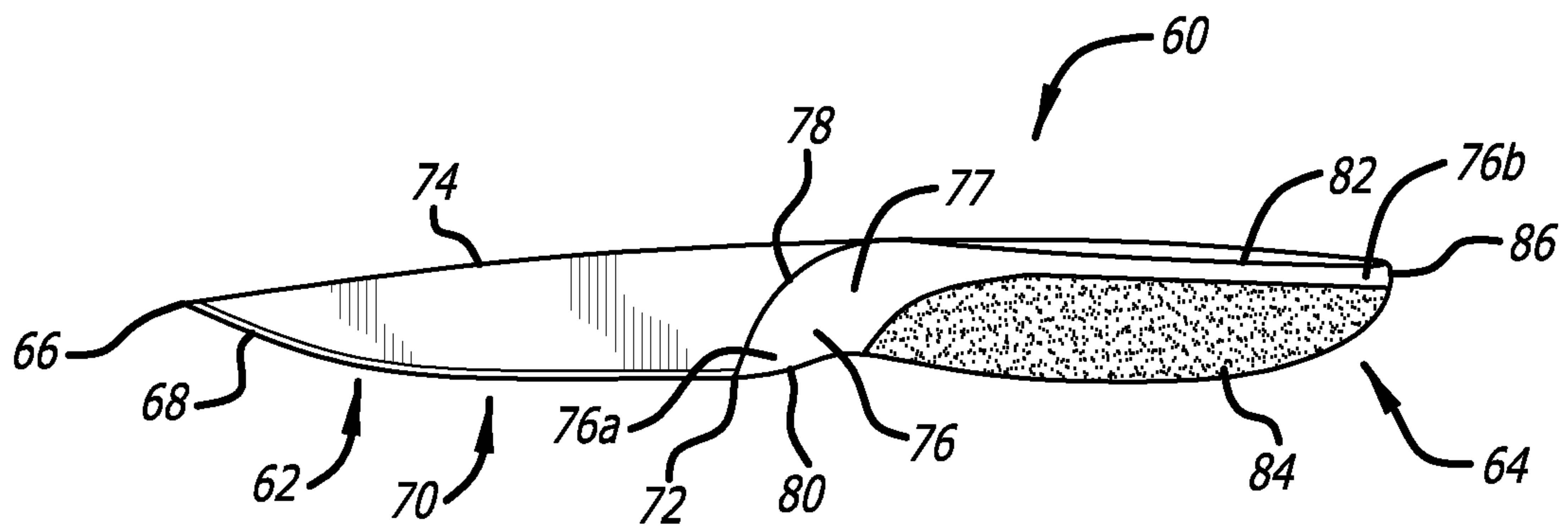




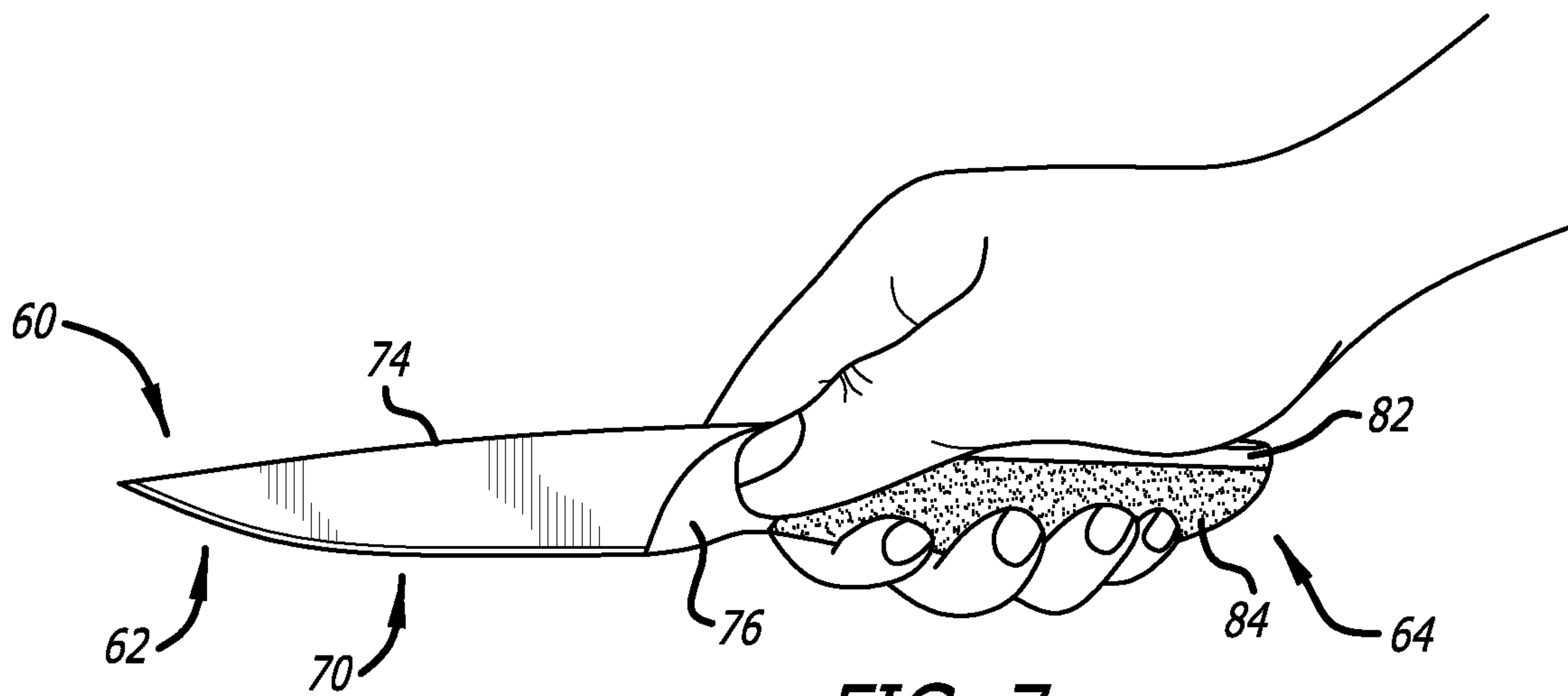




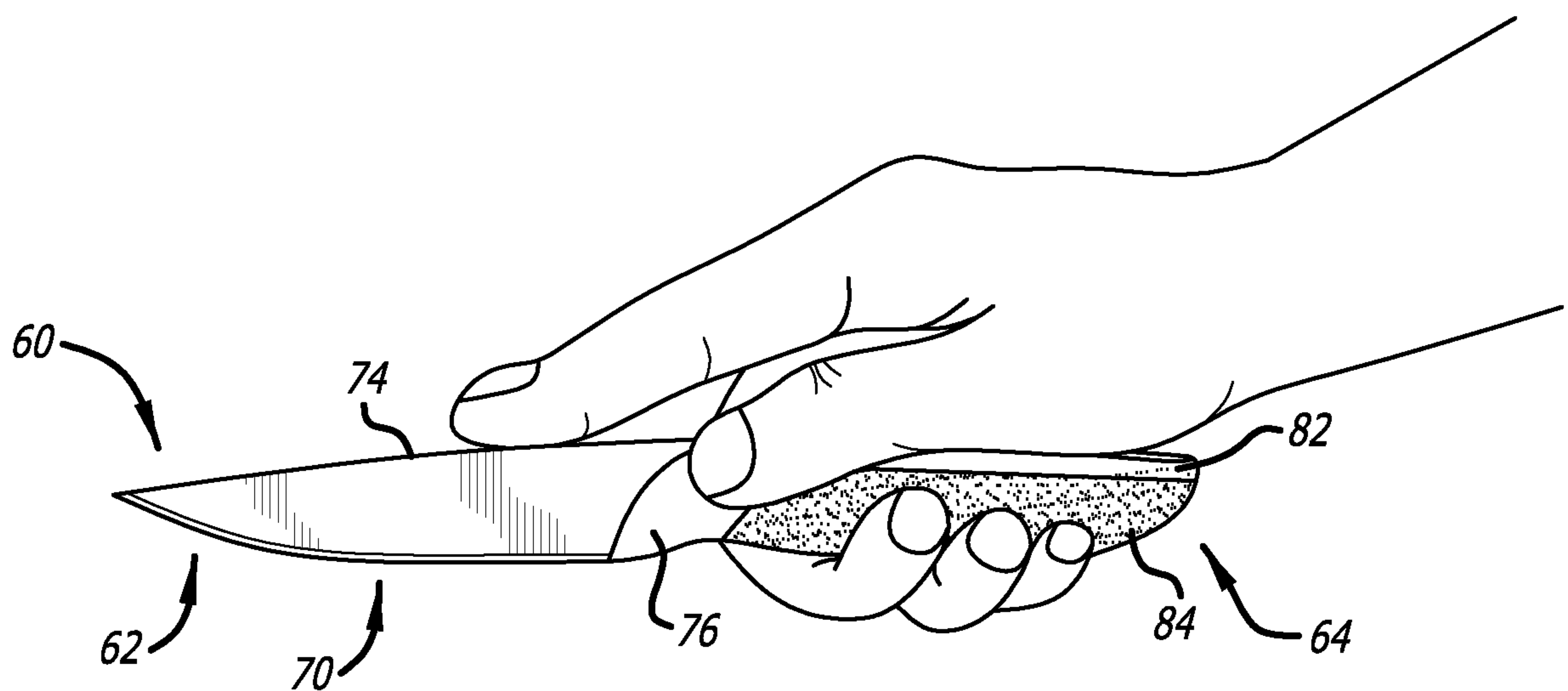
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**FIG. 6**



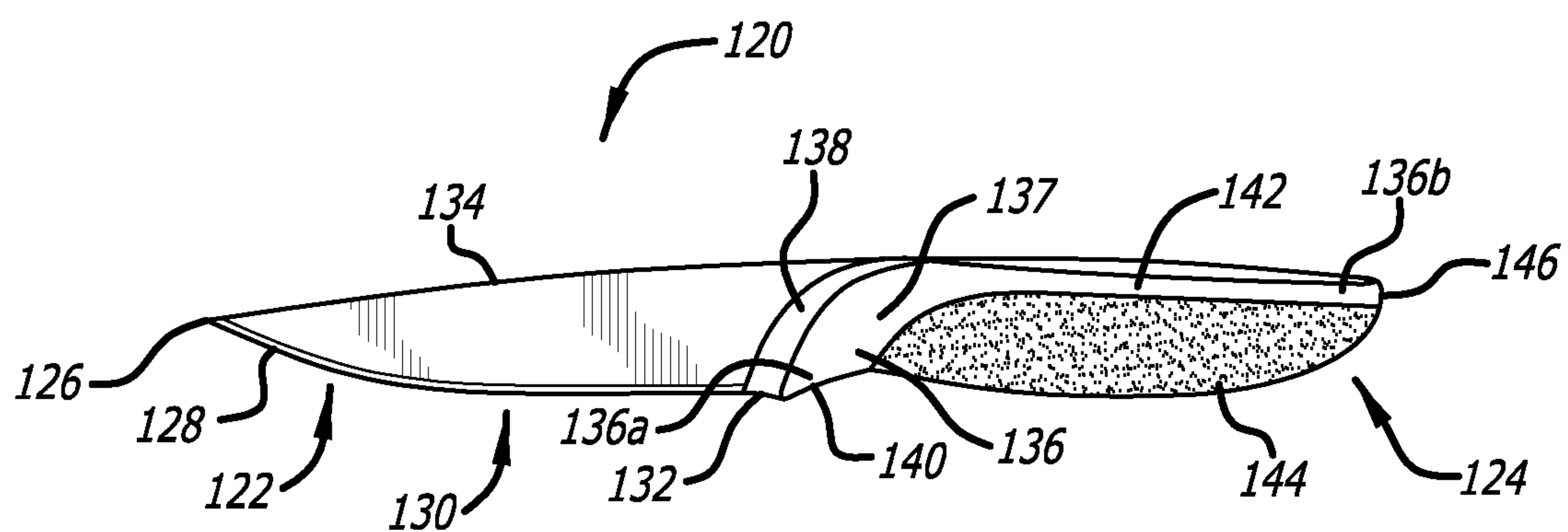
**FIG. 7**



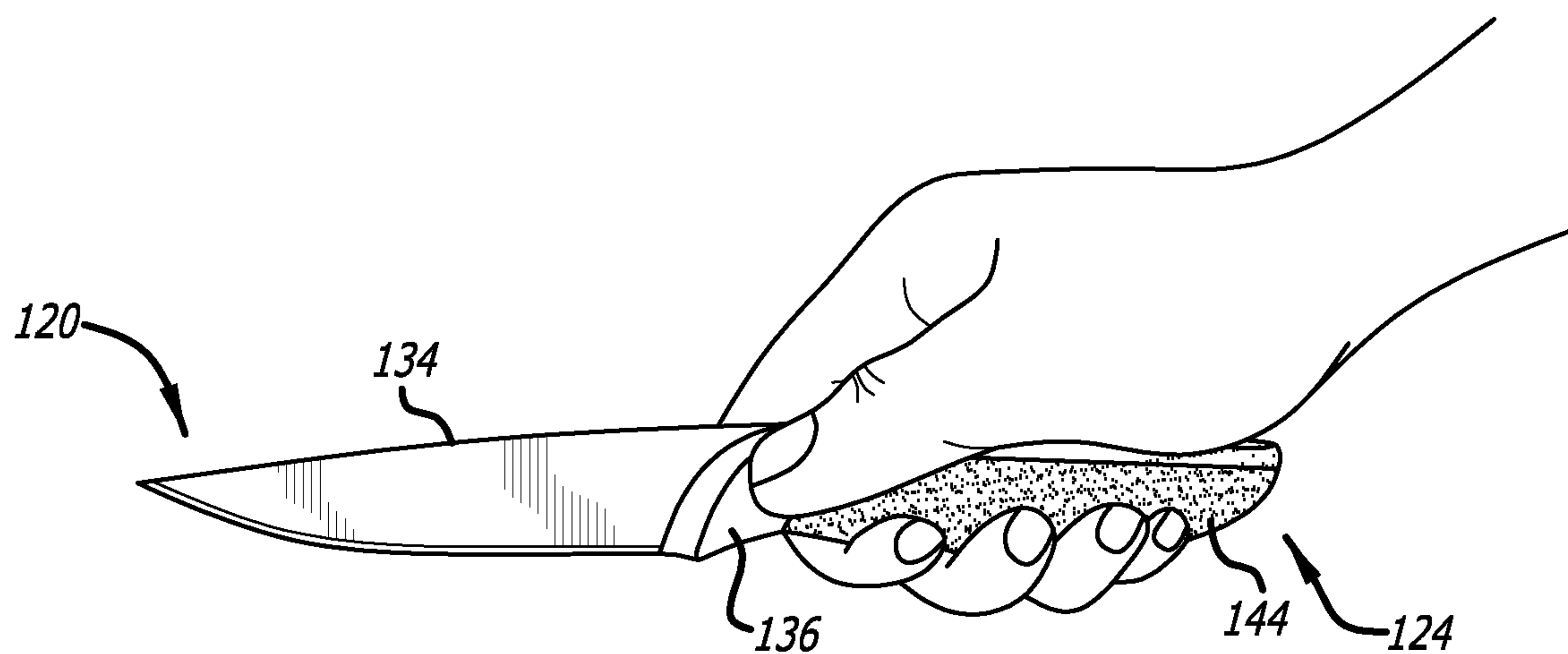
**FIG. 8**



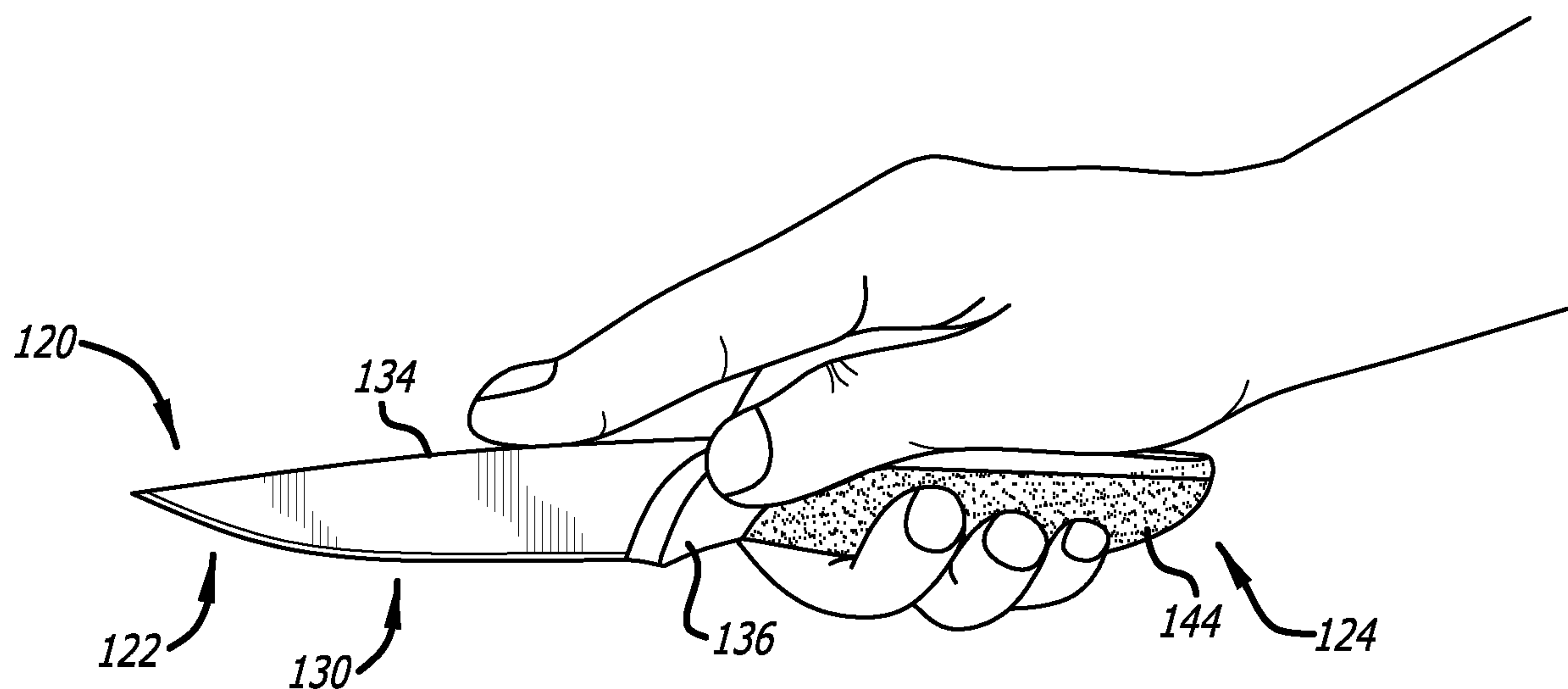
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**FIG. 9**



**FIG. 10**



**FIG. 11**



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FIG. 12

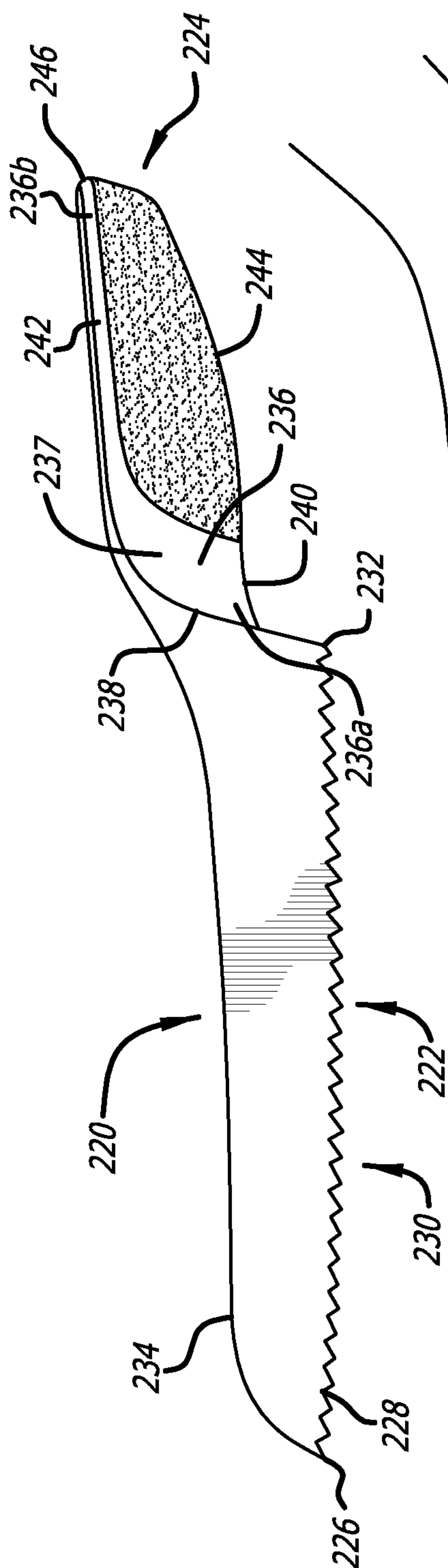


FIG. 13

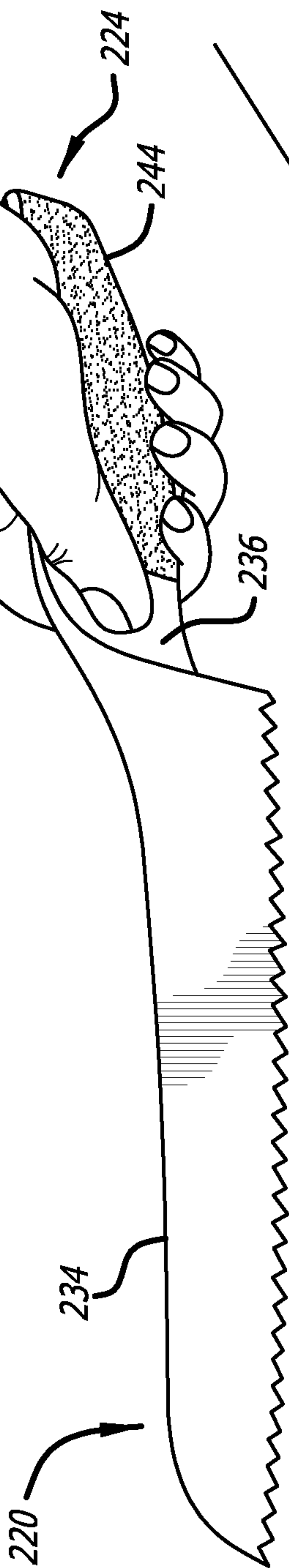


FIG. 14

