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(54) **UPPER INCLUDING DYNAMIC SUPPORTS**

(71) Applicant: **NIKE, Inc.**, Beaverton, OR (US)

(72) Inventor: **Gjermund Haugbro**, Beaverton, OR (US)

(73) Assignee: **NIKE, Inc.**, Beaverton, OR (US)

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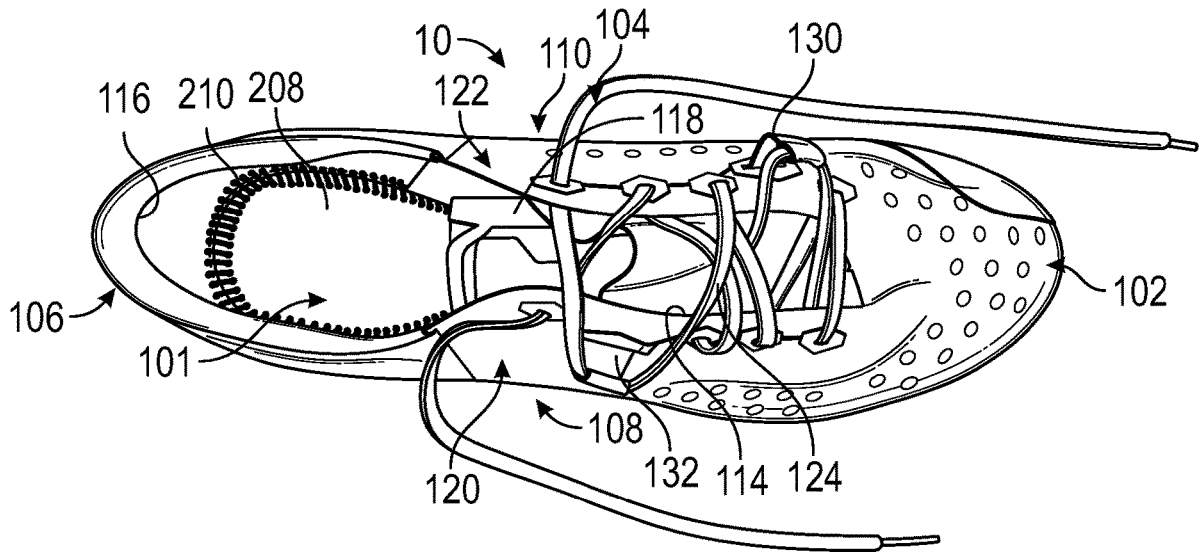
(57) **ABSTRACT**

An upper for an article of footwear includes an upper body having a first side and a second side opposite the first side. The upper body defines a throat between the first side and the second side. Further, the upper body defines an opening extending through the second side. The upper includes a lace extending across the throat between the first side and the second side. The upper further includes a dynamic support coupled to the upper body at the first side. The dynamic support extends across the throat from the first side to the second side. The dynamic support extends through the opening formed in the second side. The lace is attached to the dynamic support at the second side to apply tension on the dynamic support toward the second side when the lace is tightened.



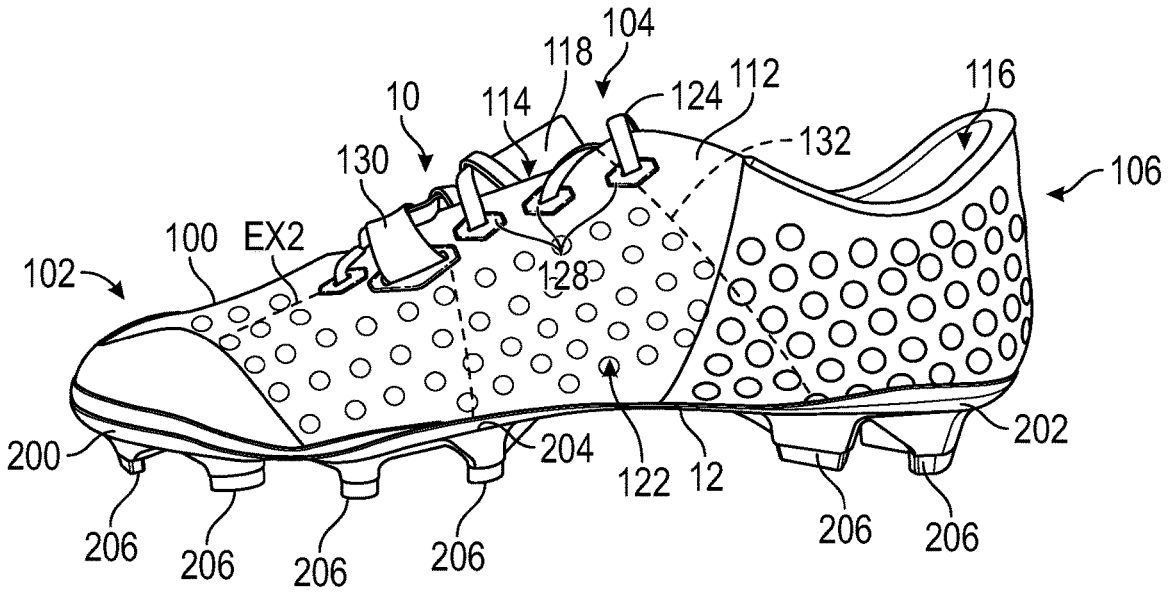

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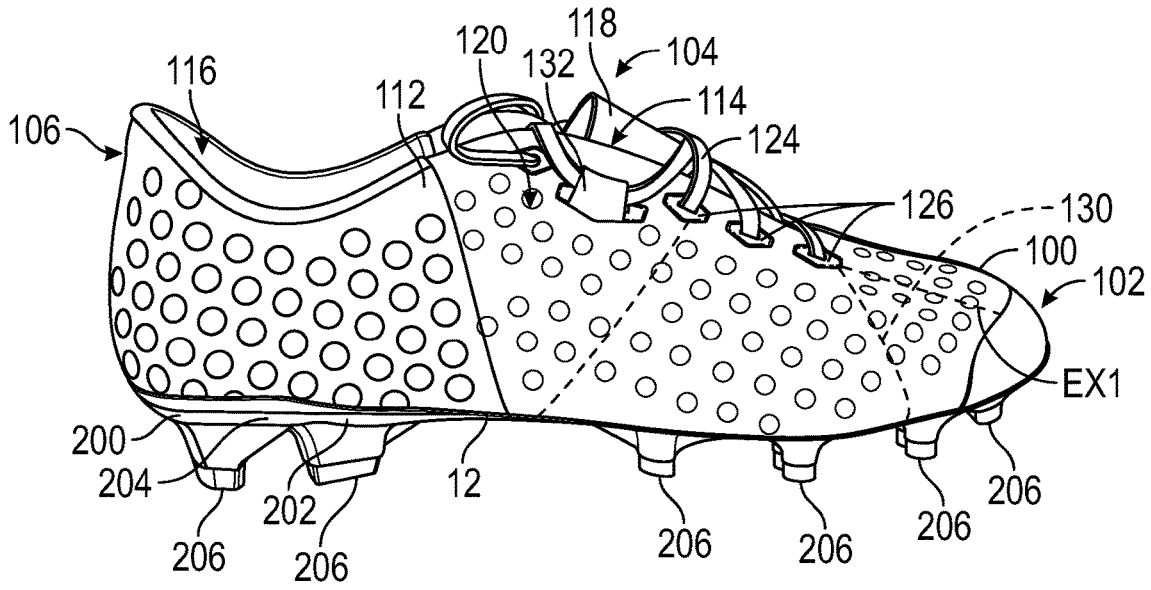
FIG. 1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EX1
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FIG. 2

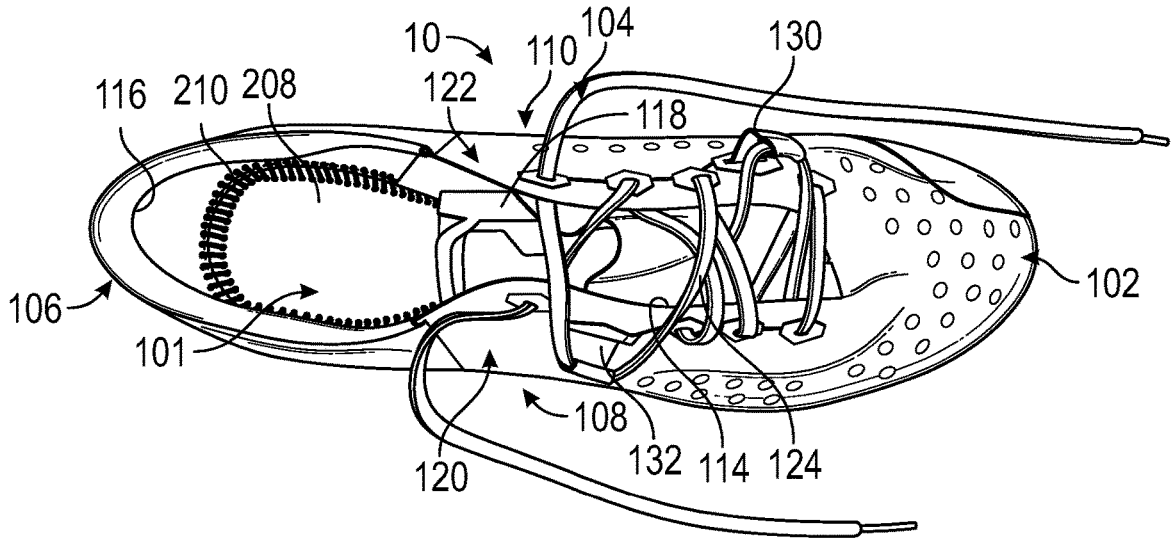
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FIG. 3

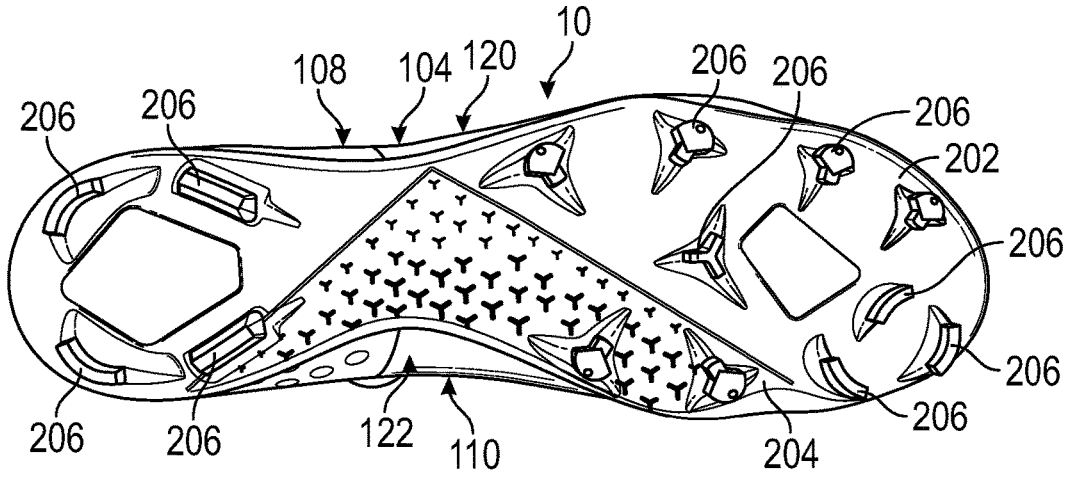
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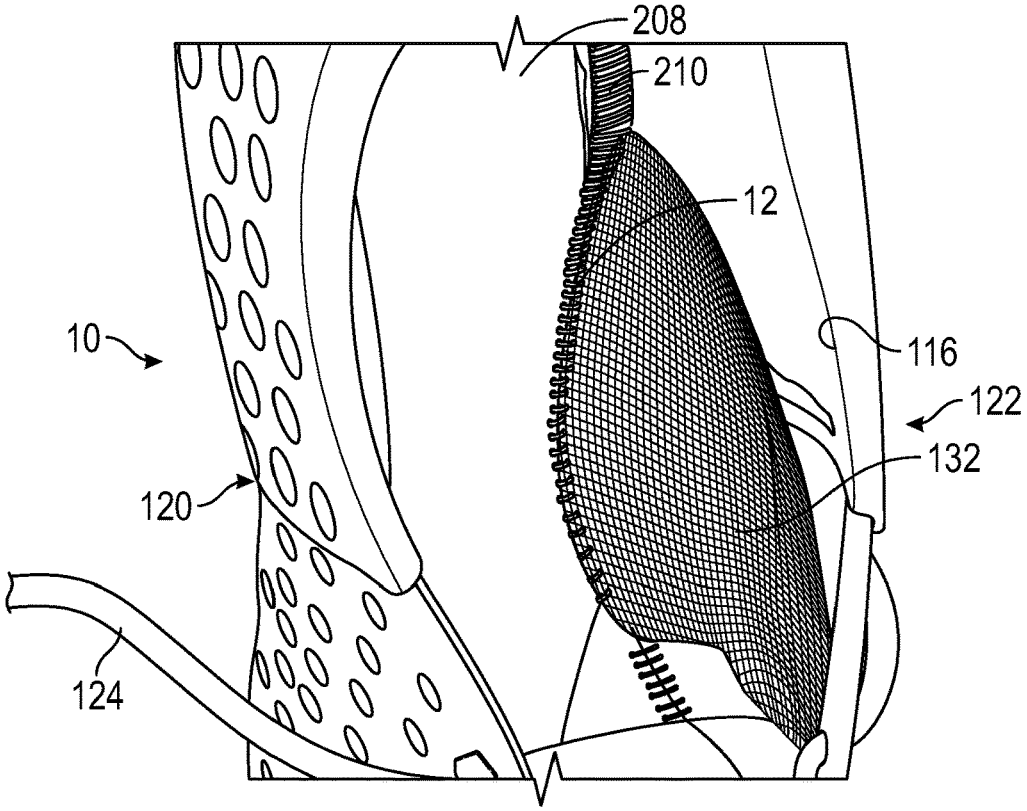
FIG. 4


208
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124

FIG. 5

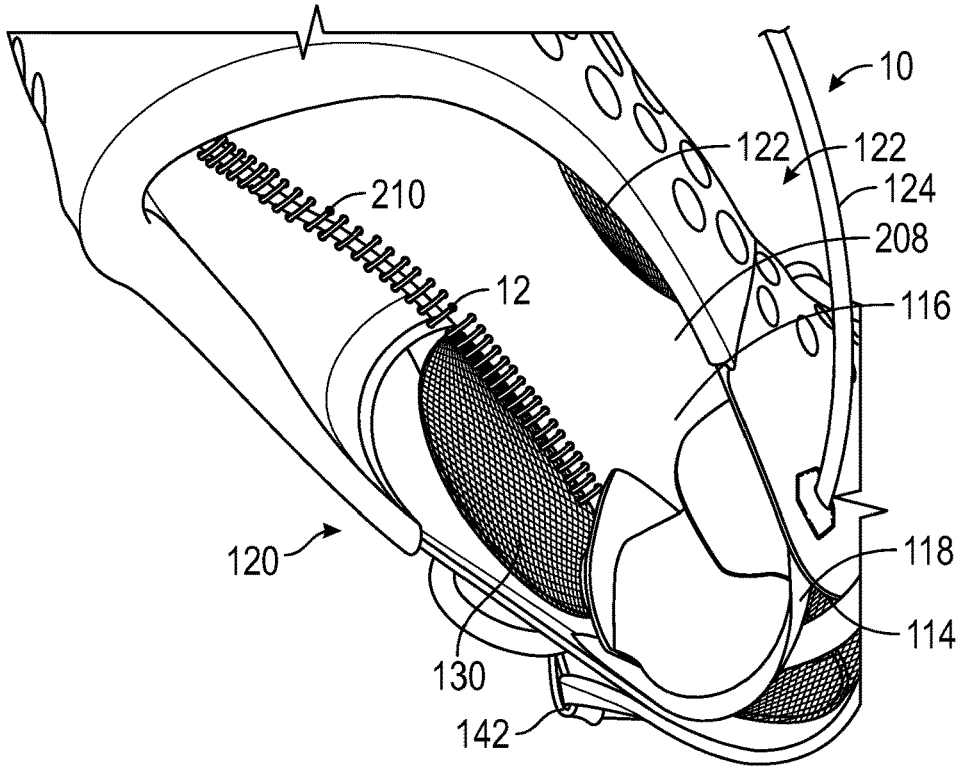
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FIG. 6

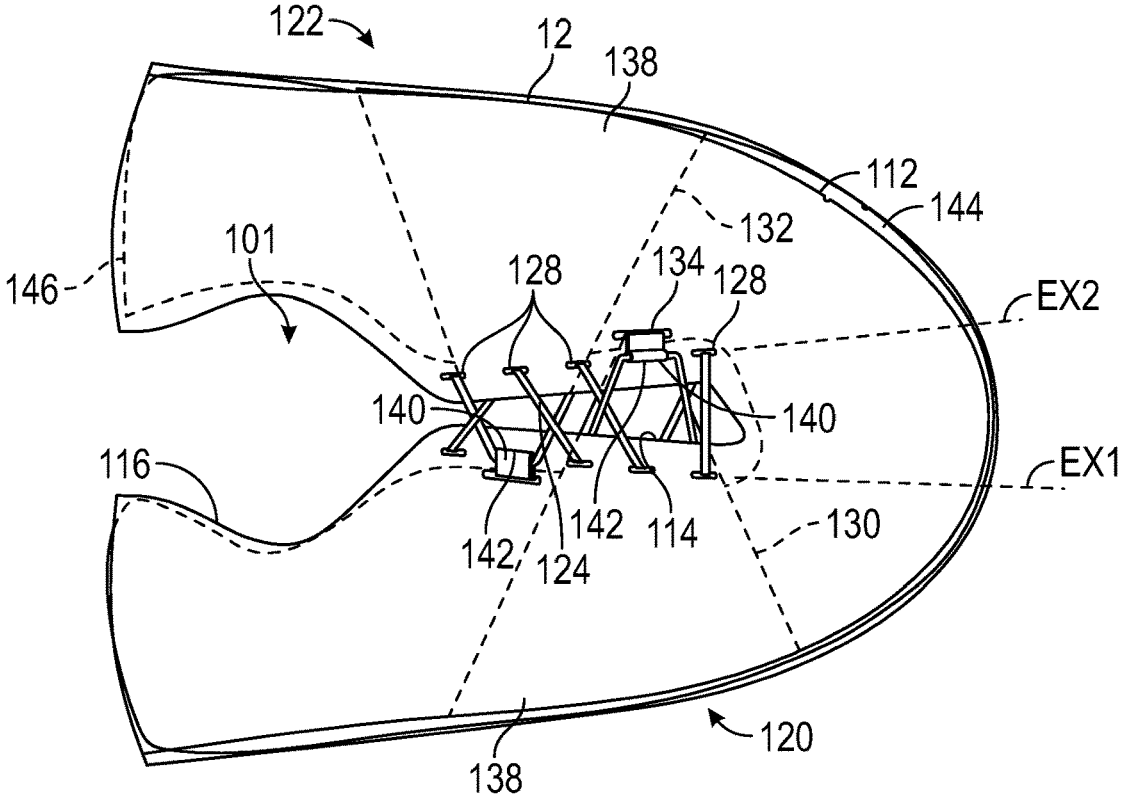
122
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FIG. 7

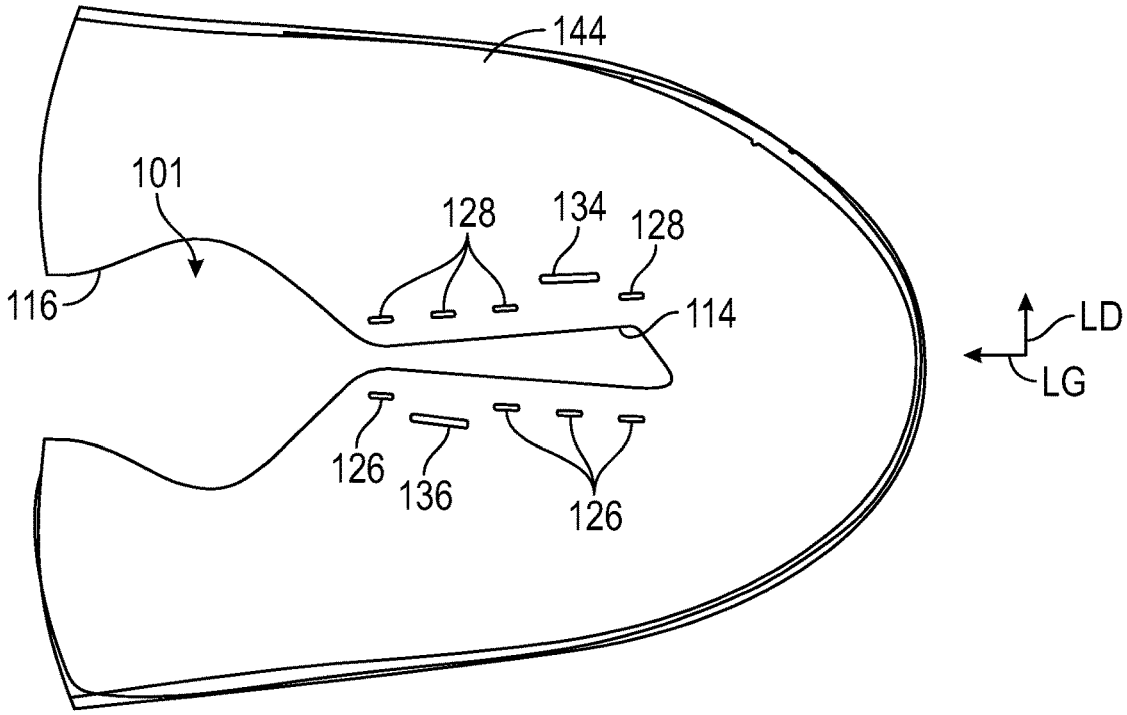
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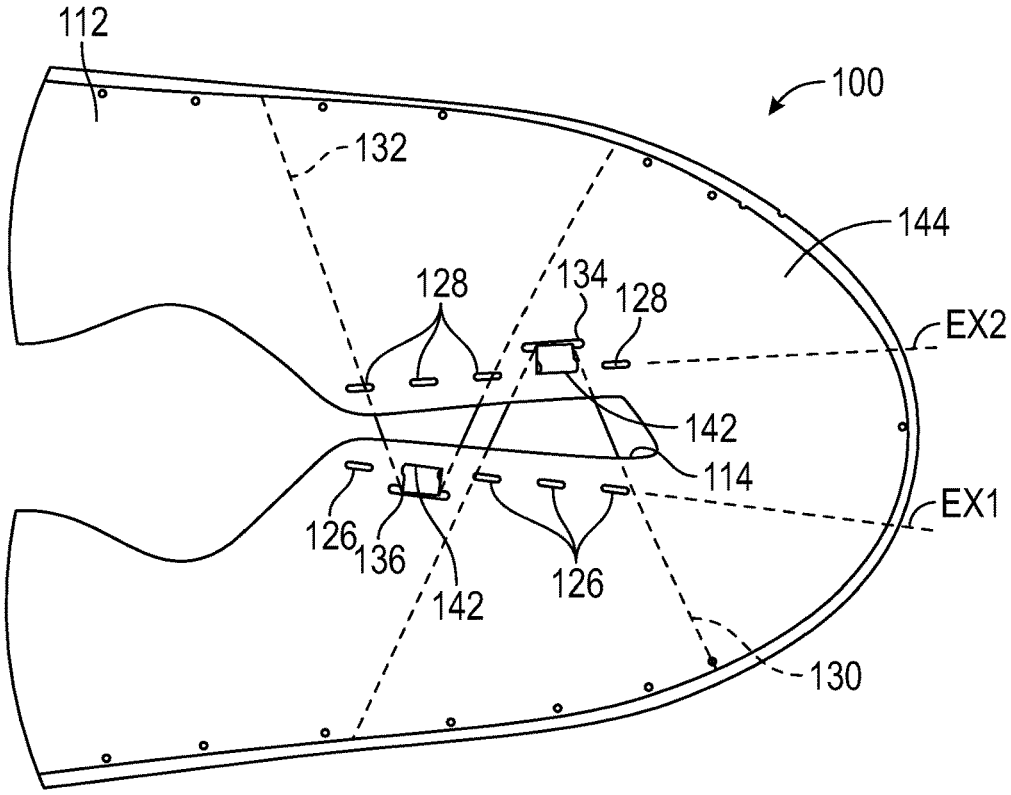
FIG. 8


112
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EX2
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EX1
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FIG. 9

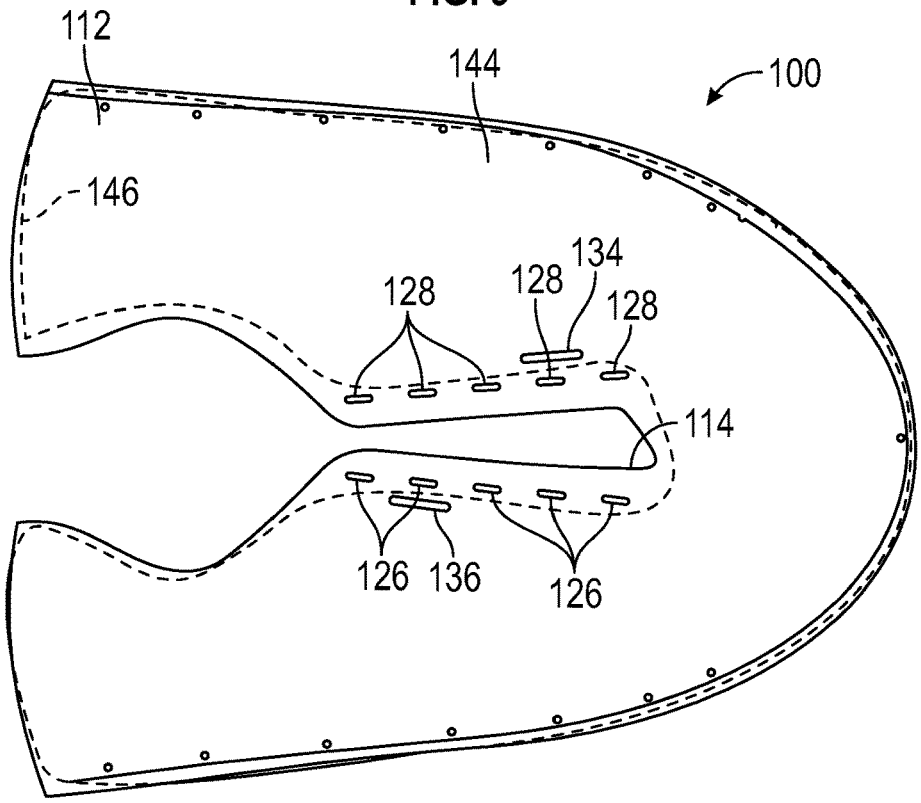
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FIG. 10

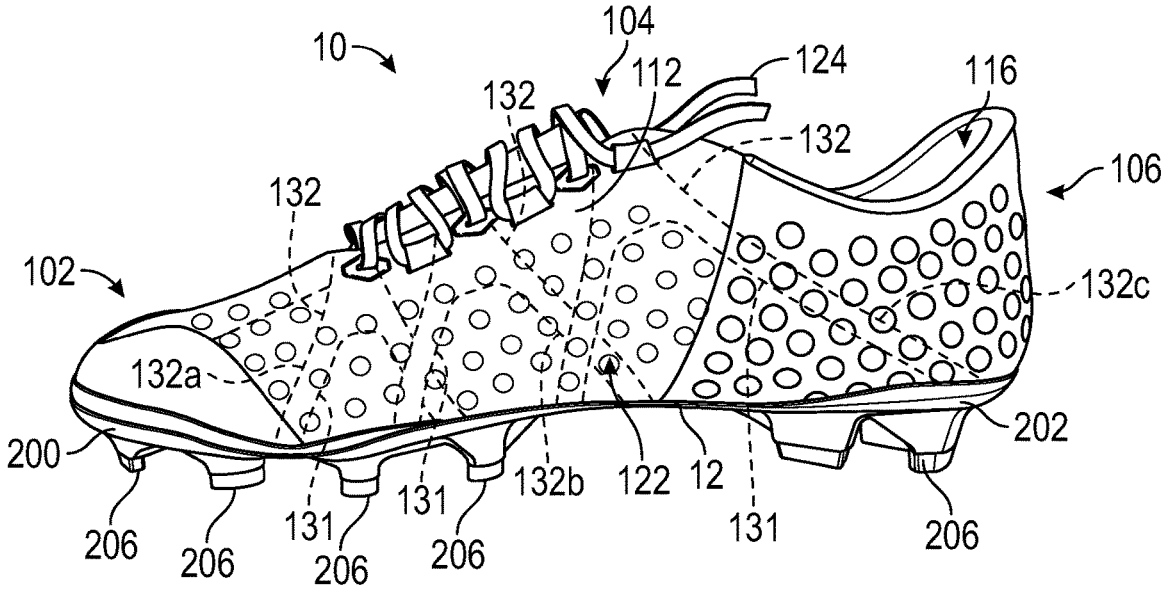
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FIG. 11

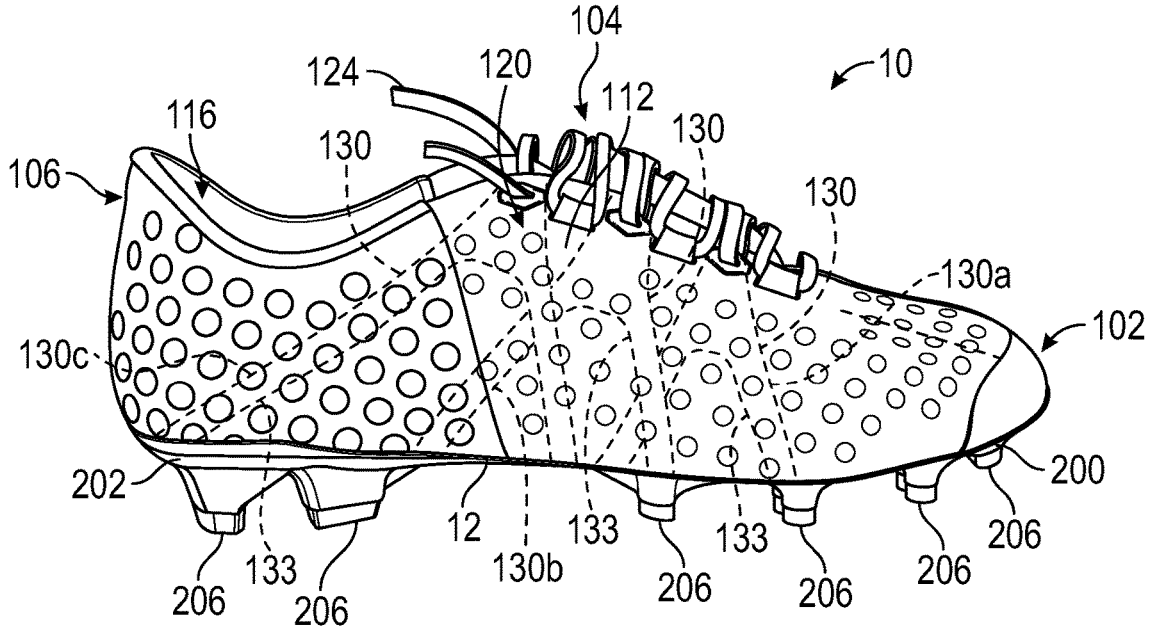
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FIG. 12

UPPER INCLUDING DYNAMIC SUPPORTS

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims priority to, and the benefit of, the U.S. Provisional Patent Application No. 63/032,493 filed on May 29, 2020, the entire disclosure of which is incorporated by reference herein.

TECHNICAL FIELD

[0002] The present teachings generally relate to an upper for an article of footwear and, more particularly, to a footwear upper with dynamic supports.

BACKGROUND

[0003] This section provides background information related to the present disclosure, which is not necessarily prior art.

[0004] Articles of footwear include an upper and a sole structure. The upper may be formed from any suitable material(s) to receive, secure, and support a foot on the sole structure. The upper may cooperate with laces, straps, or other fasteners to adjust the fit of the upper around the foot. A bottom portion of the upper, proximate to a bottom surface of the foot, attaches to the sole structure.

[0005] Sole structures include a layered arrangement extending between a ground surface and the upper. One layer of the sole structure includes an outsole that provides abrasion-resistance and traction with the ground surface. The outsole may be formed from rubber or other materials that impart durability and wear-resistance, as well as enhancing traction with the ground surface. Another layer of the sole structure includes a midsole disposed between the outsole and the upper. The midsole provides cushioning for the foot and is at least partially formed from a polymer foam material that compresses resiliently under an applied load to cushion the foot by attenuating ground-reaction forces. The midsole may define a bottom surface on one side that opposes the outsole and a footbed on the opposite side that may be contoured to conform to a profile of the bottom surface of the foot. Sole structures may also include a comfort-enhancing insole or a sockliner located within a void proximate to the bottom portion of the upper.

[0006] The metatarsophalangeal (MTP) joint of the foot is known to absorb energy as it flexes through dorsiflexion during running movements. As the foot does not move through plantarflexion until the foot is pushing off of a ground surface, the MTP joint returns little of the energy it absorbs to the running movement and, thus, is the source of an energy drain during running movements. Embedding flat and rigid plates having longitudinal stiffness within a sole structure increases the overall stiffness thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Embodiments can be better understood with reference to the following drawings and description. The components in the figures are not necessarily to scale, emphasis instead being placed upon illustrating the principles of the embodiments. Moreover, in the figures, like reference numerals designate corresponding parts throughout the different views.

[0008] FIG. **1** is a schematic, medial side view of an article of footwear.

[0009] FIG. **2** is a schematic, lateral side view of the article of footwear of FIG. **1**.

[0010] FIG. **3** is a schematic, top view of the article of footwear of FIG. **1**.

[0011] FIG. **4** is a schematic, bottom view of the article of footwear of FIG. **1**.

[0012] FIG. **5** is a schematic, perspective top, lateral view of a portion of the article of footwear of FIG. **1**.

[0013] FIG. **6** is a schematic, perspective top, medial view of a portion of the article of footwear of FIG. **1**.

[0014] FIG. **7** is a schematic top view of the upper of the article of footwear shown in FIG. **1**, depicted in a flat configuration.

[0015] FIG. **8** is a schematic, top view of an outer layer of the upper of the article of footwear shown in FIG. **1**, depicted in a flat configuration.

[0016] FIG. **9** is a schematic, top view of the outer layer and the dynamic supports of the upper of the article of footwear as shown in FIG. **1**, depicted in a flat configuration.

[0017] FIG. **10** is a schematic, top view of the outer layer disposed over an inner layer of the upper of the article of footwear shown in FIG. **1**, depicted in a flat configuration.

[0018] FIG. **11** is a schematic, medial side view of an article of footwear including a plurality of dynamic supports.

[0019] FIG. **12** is a schematic, lateral side view of an article of footwear of FIG. **12**.

DETAILED DESCRIPTION

[0020] The present disclosure describes an article of footwear, and, in particular, a unique closure system for an article of footwear. This closure system provides dynamic supports and/or straps that aid in securing the article of footwear to the foot of the user. While the present figures illustrate a cleated article of footwear, e.g. a shoe that may be used in the sport of baseball or football, in other embodiments, the present closure system may similarly be used with basketball shoes, running shoes, or any other type of footwear where dynamic or more regionally controlled support is desired.

[0021] In some aspects of the present disclosure, the article of footwear includes an upper with one or more dynamic supports that are anchored or rigidly secured to the article of footwear on opposite medial and/or lateral sides of the throat/wearer's foot. During use, the wearer inserts his foot into the void of the upper. The dynamic supports then extend from their respective anchor point across the throat and are drawn back toward their anchor point using a tension applied to the support by a lace. In many embodiments, the dynamic support passes through an opening in the upper on the opposite side, such that tensioning the lace applies a corresponding tension to the dynamic support on the anchored side, and further applies a tension to the upper opposite of the anchored side. Providing the dynamic support separate from the upper enables a more customized and/or regional fit that may adapt to different foot shapes/structures. Furthermore, because each of the dynamic supports is connected across the throat of the upper, tightening the lace causes the throat to partially close, thereby drawing together opposite sides of the upper.

[0022] The features and advantages of the present teachings are readily apparent from the following detailed

description of the modes for carrying out the present teachings when taken in connection with the accompanying drawings.

[0023] Example configurations will now be described more fully with reference to the accompanying drawings. Example configurations are provided so that this disclosure will be thorough, and will fully convey the scope of the disclosure to those of ordinary skill in the art. Specific details are set forth such as examples of specific components, devices, and methods, to provide a thorough understanding of configurations of the present disclosure. It will be apparent to those of ordinary skill in the art that specific details need not be employed, that example configurations may be embodied in many different forms, and that the specific details and the example configurations should not be construed to limit the scope of the disclosure. Further, it should be appreciated that the present technology may employ only a single dynamic support anchored on a single side of the article of footwear, it may employ a pair of dynamic supports, with each support being anchored on an opposite side of the article of footwear, and/or it may include a plurality of dynamic supports on one or both sides of the article of footwear.

[0024] The terminology used herein is for the purpose of describing particular exemplary configurations only and is not intended to be limiting. As used herein, the singular articles "a," "an," and "the" may be intended to include the plural forms as well, unless the context clearly indicates otherwise. The terms "comprises," "comprising," "including," and "having," are inclusive and therefore specify the presence of features, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, steps, operations, elements, components, and/or groups thereof The method steps, processes, and operations described herein are not to be construed as necessarily requiring their performance in the particular order discussed or illustrated, unless specifically identified as an order of performance. Additional or alternative steps may be employed.

[0025] When an element or layer is referred to as being "on," "engaged to," "connected to," "attached to," or "coupled to" another element or layer, it may be directly on, engaged, connected, attached, or coupled to the other element or layer, or intervening elements or layers may be present. In contrast, when an element is referred to as being "directly on," "directly engaged to," "directly connected to," "directly attached to," or "directly coupled to" another element or layer, there may be no intervening elements or layers present. Other words used to describe the relationship between elements should be interpreted in a like fashion (e.g., "between" versus "directly between," "adjacent" versus "directly adjacent," etc.). As used herein, the term "and/or" includes any and all combinations of one or more of the associated listed items.

[0026] The terms first, second, third, etc. may be used herein to describe various elements, components, regions, layers and/or sections. These elements, components, regions, layers and/or sections should not be limited by these terms. These terms may be only used to distinguish one element, component, region, layer or section from another region, layer or section. Terms such as "first," "second," and other numerical terms do not imply a sequence or order unless clearly indicated by the context. Thus, a first element, component, region, layer or section discussed below could be termed a second element, component, region, layer or section without departing from the teachings of the example configurations.

[0027] The terms "comprising", "including", and "having" are inclusive and therefore specify the presence of stated features, steps, operations, elements, or components, but do not preclude the presence or addition of one or more other features, steps, operations, elements, or components. Orders of steps, processes, and operations may be altered when possible, and additional or alternative steps may be employed. As used in this specification, the term "or" includes any one and all combinations of the associated listed items. The term "any of" is understood to include any possible combination of referenced items, including "any one of" the referenced items. The term "any of" is understood to include any possible combination of referenced claims of the appended claims, including "any one of" the referenced claims.

[0028] For consistency and convenience, directional adjectives may be employed throughout this detailed description corresponding to the illustrated embodiments. Those having ordinary skill in the art will recognize that terms such as "above", "below", "upward", "downward", "top", "bottom", etc., may be used descriptively relative to the figures, without representing limitations on the scope of the invention, as defined by the claims.

[0029] The term "longitudinal" refers to a direction extending along a length of a component. For example, a longitudinal direction of an article of footwear extends between a forefoot region and a heel region of the article of footwear. The term "forward" or "anterior" is used to refer to the general direction from a heel region toward a forefoot region, and the term "rearward" or "posterior" is used to refer to the opposite direction, i.e., the direction from the forefoot region toward the heel region. In some cases, a component may be identified with a longitudinal axis as well as a forward and rearward longitudinal direction along that axis. The longitudinal direction or axis may also be referred to as an anterior-posterior direction or axis.

[0030] The term "transverse" refers to a direction extending along a width of a component. For example, a transverse direction of an article of footwear extends between a lateral side and a medial side of the article of footwear. The transverse direction or axis may also be referred to as a lateral direction or axis or a mediolateral direction or axis.

[0031] The term "vertical" refers to a direction generally perpendicular to both the lateral and longitudinal directions. For example, in cases where a sole structure is planted flat on a ground surface, the vertical direction may extend from the ground surface upward. It will be understood that each of these directional adjectives may be applied to individual components of a sole structure. The term "upward" or "upwards" refers to the vertical direction pointing towards a top of the component, which may include an instep, a fastening region and/or a throat of an upper. The term "downward" or "downwards" refers to the vertical direction pointing opposite the upwards direction, toward the bottom of a component and may generally point towards the bottom of a sole structure of an article of footwear.

[0032] The "interior" of an article of footwear, such as a shoe, refers to portions at the space that is occupied by a wearer's foot when the article of footwear is worn. The "inner side" of a component refers to the side or surface of the component that is (or will be) oriented toward the

interior of the component or article of footwear in an assembled article of footwear. The "outer side" or "exterior" of a component refers to the side or surface of the component that is (or will be) oriented away from the interior of the article of footwear in an assembled article of footwear. In some cases, other components may be between the inner side of a component and the interior in the assembled article of footwear. Similarly, other components may be between an outer side of a component and the space external to the assembled article of footwear. Further, the terms "inward" and "inwardly" refer to the direction toward the interior of the component or article of footwear, such as a shoe, and the terms "outward" and "outwardly" refer to the direction toward the exterior of the component or article of footwear, such as the shoe. In addition, the term "proximal" refers to a direction that is nearer a center of a footwear component, or is closer toward a foot when the foot is inserted in the article of footwear as it is worn by a user. Likewise, the term "distal" refers to a relative position that is further away from a center of the footwear component or is further from a foot when the foot is inserted in the article of footwear as it is worn by a user. Thus, the terms proximal and distal may be understood to provide generally opposing terms to describe relative spatial positions.

[0033] With reference to FIGS. **1-4**, an article of footwear **10** may include an upper **100** and a sole structure **200** coupled to the upper **100**. The sole structure **200** may include, for example, an outsole **202** that is configured to come into contact with a ground surface. In cases where sole structure **200** comprises the outsole **202**, the sole structure **200** may be attached to any other component of a sole structure (such as a midsole or insole). In other cases, sole structure **200** may be attached directly to the upper **100** of the article of footwear **10** to enhance the structural integrity of the article of footwear **10**. The outsole **202** may include a sole plate **204** and one or more traction elements **206**, such as cleats, protruding from the sole plate **204** to enhance traction. One or more of the traction elements **206** may directly protrude from the sole plate **204** to enhance the structural integrity of the sole structure **200**. The article of footwear **10** has a bite line **12** at an interface of the sole structure **200** and the upper **100**. Thus, the sole structure **200** is coupled to the upper **100** along the bite line **12**. The bite line **12** may extend along the entire outer periphery of the article of footwear **10**.

[0034] With reference to FIGS. **5** and **6**, the sole structure **200** may include the midsole **208** connected to the outsole **202** to enhance shock absorbing properties of the sole structure **200**. The sole structure **200** may additionally include an insole disposed over the midsole **208** to provide cushioning for the wearer of the article of footwear **10**. The midsole **208** may be coupled to the upper **100** with stitching **210** or another suitable coupling.

[0035] Returning to FIGS. **1-4**, components of the upper **100** may be divided into a forefoot portion **102**, a midfoot portion **104**, and a heel portion **106**. The forefoot portion **102** may be generally associated with the toes and joints connecting the metatarsals with the phalanges. The midfoot portion **104** is disposed between the forefoot portion **102** and the heel portion **106** and may be generally associated with the arch of a foot. The heel portion **106** may be generally associated with the heel of a foot, including the calcaneus bone. In addition, the upper **100** may include a lateral side **108** and a medial side **110**. In particular, the lateral side **108** and the medial side **110** may be opposing sides of the upper **100**. Furthermore, both the lateral side **108** and the medial side **110** may extend through the forefoot portion **102**, the midfoot portion **104** and the heel portion **106**. The upper **100** defines a void **101** configured and sized to receive a foot of a footwear wearer.

[0036] It will be understood that the forefoot portion **102**, the midfoot portion **104** and the heel portion **106** are only intended for purposes of description and are not intended to demarcate precise regions of the upper **100**. The lateral side **108** and the medial side **110** are intended to represent generally two sides of the upper **100**, rather than precisely demarcating the upper **100** into two halves. In addition, the forefoot portion **102**, the midfoot portion **104**, and the heel portion **106**, as well as the lateral side **108** and the medial side **110**, may also be applied to individual components of the upper **100** and the sole structure **200**, such as a sockliner, the midsole **208** (FIGS. **5** and **6**) or another component of the sole structure **200**.

[0037] The upper **100** includes an upper body **112** having a layered configuration as discussed below. The upper **100** defines a throat **114** and an ankle opening **116** extending thought the upper body **112**. The ankle opening **116** allows a user to insert his foot into the article of footwear **10**. The throat **114** may partially receive a tongue **118** of the upper **100**. The tongue **118** is coupled to the upper body **112**. The upper body **112** has a first side **120** (which corresponds with the lateral side **108** of the upper **100**) and a second side **122** (which corresponds to the medial side **110** of the upper **100**). The second side **122** is opposite the first side **120**. The throat **114** defined by the upper body **112** is disposed between the first side **120** and the second side **122**.

[0038] The upper **100** includes at least one lace **124** extending across the throat **114** between the first side **120** and the second side **122** of the upper body **112**. While the figures show a single lace **124** to minimize part count, it is envisioned that the upper **100** may include more than one lace **124**. The upper body **112** defines a first plurality of eyelets **126** and a second plurality of eyelets **128** each configured to receive the lace **124** The first plurality of eyelets **126** is disposed on the first side **120**. The second plurality of eyelets **128** is disposed on the second side **122**. The first plurality of eyelets **126** and the second plurality of eyelets **128** extend through the upper body **112** to receive the lace **124**. Accordingly, each of the first plurality of eyelets **126** and the second plurality of eyelets **128** are sized to receive the lace **124**. The lace **124** extends across the throat **114** and through the first plurality of eyelets **126** and the second plurality of eyelets **128**. For example, the lace **124** may be arranged in a zig-zag configuration while extending through the first plurality of eyelets **126** and the second plurality of eyelets **128**. The first plurality of eyelets **126** is aligned along a first eyelet axis EX**1**, and the second plurality of eyelets **128** is aligned along a second eyelet axis EX**2**. Accordingly, the first eyelet axis EX**1** interests all of the first plurality of eyelets **126**, and the second eyelet axis EX**2** intersects all of the second plurality of eyelets **128**.

[0039] With reference to FIGS. **7-10**, the upper **100** further includes a first dynamic support **130** and a second dynamic support **132** each coupled to the upper body **112**. The first dynamic support **130** is coupled to the upper body **112** at the first side **120**, whereas the second dynamic support **132** is coupled to the upper body **112** at the second side **122**. Specifically, each of the first dynamic support **130** and the

second dynamic support **132** is attached to the upper body **112** at the bite line **12** of the article of footwear **10**, but on opposite sides (i.e., the first side **120** and the second side **122**, respectively) of the upper body **112**. . The first dynamic support **130** and/or the second dynamic support **132** may be configured as dynamic straps fixed to the upper body **112** at the bite line **12**. Each of the first dynamic support **130** and the second dynamic support **132** extends across the throat **114** to tighten the upper **100** when the lace **124** is tightened as described below. Specifically, the first dynamic support **130** extends across the throat **114** from the first side **120** to the second side **122** of the upper body **112**, and the second dynamic support **132** extends across the throat **114** from the second side **122** to the first side **120** of the upper body **112**.

[0040] The upper body **112** defines a first opening **134** extending though the second side **122** of the upper **100**. Further, the upper **100** defines a second opening **136** extending through the first side **120** of the upper **100**. The first dynamic support **130** extends through the first opening **134** formed in the second side **122** of the upper **100**, and the second dynamic support **132** extends through the second opening **136** formed in the first side **120** of the upper **100**. The lace **124** is attached to the first dynamic support **130** at the second side **122** of the upper body **112** to apply tension on the first dynamic support **130** when the lace **124** is tightened. Likewise, the lace **124** is attached to the second dynamic support **132** at the first side **120** to apply tension on the second dynamic support **132** when the lace **124** is tightened. Accordingly, tightening the lace **124** causes the first side **120** and the second side **122** of the upper body **112** to move toward each other, thereby tightening the upper **100** around the foot of the wearer. No portion of the lace **124** extends through the first opening **134** or the second opening **136**.

[0041] The upper body **112** may be partly or wholly made of a first material, and the each of the first dynamic support **130** and the second dynamic support **132** may be partly or wholly made of a second material. The tensile strength of the second material may be greater than the tensile strength of the first material in order to effectively pull the first side **120** and the second side **122** of the upper body **112** toward each other when the lace **124** is tightened. As a non-limiting example, the second material may be between ten percent (10%) and twenty-five percent (25%) greater than the tensile strength of the first material to effectively pull the first side **120** and the second side **122** of the upper body **112** toward each other when the lace **124** is tightened without damaging the upper body **112**.

[0042] Each of the first dynamic supports **130** and the second dynamic support **132** includes a first support end **138** and a second support end **140** opposite to the first support end **138**. The first support end **138** of the first dynamic support **130** and the second dynamic support **132** is attached to the upper body **112** at the bite line **12** of the article of footwear **10** to enhance the structural integrity of the connection between the upper body **112** and each of the first dynamic support **130** and the second dynamic support **132**. The second support end **140** of each of the first dynamic support **130** and the second dynamic support **132** defines a loop **142** (which is also shown in FIG. **6**) configured, sized, and shaped to receive the lace **124**. The lace **124** is sized to slide through the loop **142**, thereby allowing the lace **124** to apply tension of the first dynamic support **130** and the second dynamic support **132** as the lace **124** is tightened. In particular, tightening the lace **124** causes the lace **124** to simultaneously apply tension: (a) on the first dynamic support **130** toward the second side **122**; and (b) on the second dynamic support **132** toward the first side **120**. As a consequence, the upper **100** is tightened and secured around a foot of the footwear wearer.

[0043] With reference to FIGS. **7-10**, the upper body **112** may have a layered configuration. In particular, the upper body **112** may include an outer layer **144** and an inner layer **146** coupled to the outer layer **144**. The outer layer **144** is farther from the void **101** than the inner layer **146**. Each of the first dynamic support **130** and the second dynamic support **132** is disposed between the outer layer **144** and the inner layer **146** to securely couple the first dynamic support **130** and the second dynamic support **132** to the upper body **112**.

[0044] Each of the first plurality of eyelets **126**, the second plurality of eyelets **128**, the first opening **134**, and the second opening **136** extend solely through the outer layer **144** (as shown in FIG. **8**) to facilitate manufacturing of the upper body **112**. The first opening **134** is spaced apart from the second eyelet axis EX**2** along a transverse direction LD, and the second opening **136** is spaced apart from the first eyelet axis EX**1** along the transverse direction LD to facilitate at least partial closure of the throat **114** when the lace **124** is tightened. The first opening **134** is spaced apart from the second opening **136** along a longitudinal direction LG to facilitate at least partial closure of the throat **114** when the lace **124** is tightened. Each of the first opening **134** and the second opening **136** is larger than each of the first plurality of eyelets **126** and the second plurality of eyelets **128** to allow the loops **142** to be inserted in the first opening **134** and the second opening **136**. Each of the first dynamic support **130** and the second dynamic support **132** has a substantially triangular shape to maximize the area of the first dynamic support **130** and the second dynamic support **132** that is attached at the bite line **12** of the article of footwear **10** while allowing the loops **142** to be inserted into the first opening **134** and the second opening **136**.

[0045] During use, the wearer may insert his foot into the void **101** of the upper **100**. Then, the laces **124** are tightened. As a result, the lace **124** applies tension on the first dynamic support **130** toward the second side **122** and on the second dynamic support **132** toward the first side **120**. Because each of the first dynamic support **130** and the second dynamic support **132** is connected across the throats **114** between the first side **120** and the second side **122** of the upper body **112**, tightening the lace **124** causes the throat **114** to partially close, thereby moving the first side **120** and the second side **122** of the upper body **112** toward each other. As a consequence, the upper **100** is tightened around the wearer's foot.

[0046] With reference to FIGS. **11** and **12**, the structure and function of the article of footwear **10** shown in FIGS. **11** and **12** is substantially identical to the article of footwear **10** described above with respect to FIGS. **1-10**, except for the features described below. In the depicted embodiment, the article of footwear **10** includes a plurality of first dynamic supports **130** and a plurality of second dynamic supports **132** coupled to the upper body **112**. Each of the plurality of first dynamic supports **130** is coupled to the upper body **112** at the first side **120**, whereas each of the plurality of second dynamic supports **132** is coupled to the upper body **112** at the second side **122**. Each of the plurality of first dynamic supports **130** and the plurality of the second dynamic

supports **132** extends across the throat **114** to tighten the upper **100** when the lace **124** is tightened. Specifically, each of the plurality first dynamic supports **130** extends across the throat **114** from the first side **120** to the second side **122** of the upper body **112**, and each of the plurality of second dynamic supports **132** extends across the throat **114** from the second side **122** to the first side **120** of the upper body **112**.

[0047] The plurality of first dynamic supports **130** may include a first forefoot dynamic support **130***a*, a first midfoot dynamic support **130***b*, and a first heel dynamic support **130***c*. The first forefoot dynamic support **130***a* is attached to the upper body **112** at the forefoot portion **102**. The second midfoot dynamic support **130***b* is attached to the upper body **112** at the midfoot portion **104**. The first heel dynamic support **130***c* is attached to the upper body **112** at the heel portion **106**. While each of the plurality of first dynamic supports **130** has a substantially triangular shape, it is contemplated that the first dynamic supports **130** do not necessarily have a substantially triangular shape. As a non-limiting example, one or more of the plurality of first dynamic supports **130** may have a center void portion **131**. Further, one or more of the first dynamic supports **130** may overlap each other to minimize the space occupied by the first dynamic supports **130**.

[0048] The plurality of second dynamic supports **132** may include a second forefoot dynamic support **132***a*, a second midfoot dynamic support **132***b*, and a second heel dynamic support **132***c*. The second forefoot dynamic support **130***a* is attached to the upper body **112** at the forefoot portion **102**. The second midfoot dynamic support **130***a* is attached to the upper body **112** at the midfoot portion **104**. The second heel dynamic support **130***c* is attached to the upper body **112** at the heel portion **106**. Although each of the plurality of second dynamic supports **132** has a substantially triangular shape, it is envisioned that the second dynamic supports **132** do not necessarily have a triangular shape. As a non-limiting example, one or more of the plurality of second dynamic supports **132** may have a center void portion **133**. Further, one or more of the second dynamic supports **132** may overlap each other to minimize the space occupied by the second dynamic supports **132**.

[0049] Clause 1: An upper for an article of footwear includes an upper body having a first side and a second side opposite the first side. The upper body defines a throat between the first side and the second side. Further, the upper body defines an opening extending through the second side. The upper includes a lace extending across the throat between the first side and the second side. The upper further includes a dynamic support coupled to the upper body at the first side. The dynamic support extends across the throat from the first side to the second side. The dynamic support extends through the opening formed in the second side. The lace is attached to the dynamic support at the second side to apply tension on the dynamic support toward the second side when the lace is tightened.

[0050] Clause 2: The upper according to Clause 1, wherein the dynamic support is considered to be a first dynamic support. The upper further includes a second dynamic support coupled to the second side. The second dynamic support extends across the throat from the second side to the first side. The opening is a first opening. The upper body defines a second opening extending through the first side. The second dynamic support extends through the second opening formed in the first side. The lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the first side when the lace is tightened.

[0051] Clause 3: The upper according to Clause 1 and/or Clause 2, wherein the dynamic support is attached to the upper body at a bite line of the article of footwear.

[0052] Clause 4: The upper according to Clause 1, 2, and/or 3, wherein the dynamic support includes a first support and a second support end opposite the first support end. The first support end is attached to the upper body at the bite line of the article of footwear. The second support end defines a loop configured to receive the lace. The loop receives the lace to apply tension on the dynamic support toward the second side when the lace is tightened.

[0053] Clause 5: The upper according to any of Clause 1, 2, 3, and/or 4, wherein the upper body includes an outer layer and an inner layer coupled to the outer layer. The dynamic support is disposed between the inner layer and the outer layer.

[0054] Clause 6: The upper according to any of Clause 1, 2, 3, 4, and/or 5, wherein the opening extends through the outer layer of the upper body.

[0055] Clause 7: The upper according to any of Clause 1, 2, 3, 4, 5, and/or 6, wherein the upper body defines a first plurality of eyelets and a second plurality of eyelets. The first plurality of eyelets is disposed on the first side. The second plurality of eyelets is disposed on the second side. The first plurality of eyelets and the second plurality of eyelets extend through the upper body. The first plurality of eyelets and the second plurality of eyelets are sized to receive the lace. The lace extends across the throat and through the first plurality of eyelets and the second plurality of eyelets. The first plurality of eyelets is aligned along a first eyelet axis, and the second plurality of eyelets is aligned along a second eyelet axis.

[0056] Clause 8: The upper according to any of Clauses 1, 2, 3, 4, 5, 6, and/or 7, wherein the opening is spaced apart from the second eyelet axis along a transverse direction.

[0057] Clause 9: The upper according to any of Clauses 1, 2, 3, 4, 5, 6, 7, and/or 8, wherein the opening is larger than each of the first plurality of eyelets and the second plurality of eyelets.

[0058] Clause 10: The upper according to any of Clauses 1, 2, 3, 4, 5, 6, 7, 8, and/or 9, wherein the dynamic support is a first dynamic support. The upper further includes a second dynamic support coupled to the second side. The second dynamic support extends across the throat from the second side to the first side. The opening is a first opening, the upper body defines a second opening extending through the first side. The second dynamic support extends through the second opening formed in the first side. The lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the first side when the lace is tightened. Each of the first dynamic support and the second dynamic support includes a first support end and a second support end opposite the first support end. The first support end is attached to the upper body at a bite line of the article of footwear. The second support end defines a loop configured to receive the lace. The loop receives the lace to apply tension on each of the first dynamic support and the second dynamic support toward the second side and the first side, respectively, when the lace is tightened.

[0059] Clause 11: An article of footwear includes a sole structure and an upper coupled to the sole structure. The article of footwear has a bite line at an interface of the sole structure and the upper. The upper includes an upper body having a first side and a second side opposite the first side. The upper body defines a throat between the first side and the second side. The upper body defines an opening extending through the second side. The upper further includes a lace extending across the throat between the first side and the second side. Also, the upper includes a dynamic support coupled to the upper body at the first side. The dynamic support extends across the throat from the first side to the second side. The dynamic support extends through the opening formed in the second side. The lace is attached to the dynamic support at the second side to apply tension on the dynamic support toward the second side when the lace is tightened.

[0060] Clause 12: The article of footwear according to Clause 11, wherein the dynamic support is a first dynamic support. The upper further includes a second dynamic support coupled to the second side. The second dynamic support extends across the throat from the second side to the first side, the opening is a first opening. The upper body defines a second opening extending through the first side. The second dynamic support extends through the second opening formed in the first side. The lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the first side when the lace is tightened.

[0061] Clause 13: The article of footwear according to any of Clause 11 and/or 12, wherein the dynamic support is attached to the upper body at the bite line of the article of footwear.

[0062] Clause 14: The article of footwear according to any of Clauses 11, 12, and/or 13, wherein the dynamic support includes a first support end and a second support end opposite the first support end. The first support end is attached to the upper body at the bite line of the article of footwear. The second support end defines a loop configured to receive the lace. The loop receives the lace to apply tension on the dynamic support toward the second side when the lace is tightened.

[0063] Clause 15: The article of footwear according to any of the Clauses 11, 12, 13, and/or 14, wherein the upper body includes an outer layer and an inner layer coupled to the outer layer. The dynamic support is disposed between the inner layer and the outer layer.

[0064] Clause 16: The article of footwear according to any of Clauses 11, 12, 13, 14, and/or 15, wherein the opening extends through the outer layer of the upper body.

[0065] Clause 17: The article of footwear according to any of Clauses 11, 12, 13, 14, 15, and/or 16, wherein the upper body defines a first plurality of eyelets and a second plurality of eyelets. The first plurality of eyelets is disposed on the first side. The second plurality of eyelets is disposed on the second side. The first plurality of eyelets and the second plurality of eyelets extend through the upper body. The first plurality of eyelets and the second plurality of eyelets are sized to receive the lace. The lace extends across the throat and through the first plurality of eyelets and the second plurality of eyelets. The first plurality of eyelets is aligned along a first eyelet axis. The second plurality of eyelets is aligned along a second eyelet axis.

[0066] Clause 18: The article of footwear according to any of Clauses 11, 12, 13, 14, 15, 16, and/or 17, wherein the opening is spaced apart from the second eyelet axis along a transverse direction.

[0067] Clause 19: The article of footwear according to any of Clauses 11, 12, 13, 14, 15, 16, 17, and/or 18, wherein the opening is larger than each of the first plurality of eyelets and the second plurality of eyelets.

[0068] Clause 20: The article of footwear according to any of the Clauses 11, 12, 13, 14, 15, 16, 17, 18, and/or 19, wherein the dynamic support is considered to be a first dynamic support. The upper further includes a second dynamic support coupled to the second side. The second dynamic support extends across the throat from the second side to the first side. The opening is considered to be a first opening. The upper body defines a second opening extending through the first side. The second dynamic support extends through the second opening formed in the first side. The lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the first side when the lace is tightened. Each of the first dynamic support and the second dynamic support includes a first support end and a second support end opposite the first support end. The first support end is attached to the upper body at the bite line of the article of footwear. The second support end defines a loop configured to receive the lace. The loop receives the lace to apply tension on each of the first dynamic support and the second dynamic support toward the second side and the first side, respectively, when the lace is tightened.

[0069] While various embodiments have been described, the description is intended to be exemplary, rather than limiting. It will be apparent to those of ordinary skill in the art that many more embodiments and implementations are possible that are within the scope of the embodiments. Any feature of any embodiment may be used in combination with or substituted for any other feature or element in any other embodiment unless specifically restricted. Accordingly, the embodiments are not to be restricted except in light of the attached claims and their equivalents. Also, various modifications and changes may be made within the scope of the attached claims.

[0070] While several modes for carrying out the many aspects of the present teachings have been described in detail, those familiar with the art to which these teachings relate will recognize various alternative aspects for practicing the present teachings that are within the scope of the appended claims. It is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and exemplary of the entire range of alternative embodiments that an ordinarily skilled artisan would recognize as implied by, structurally and/or functionally equivalent to, or otherwise rendered obvious based upon the included content, and not as limited solely to those explicitly depicted and/or described embodiments.

What is claimed is:

1. An upper for an article of footwear, comprising:

an upper body having a first side and a second side opposite the first side, the upper body defining a throat between the first side and the second side, and the upper body defining an opening extending through the second side;

a lace extending across the throat between the first side and the second side;

a dynamic support coupled to the upper body at the first side, the dynamic support extending across the throat from the first side to the second side, and the dynamic support extending through the opening formed in the second side; and

wherein the lace is attached to the dynamic support at the second side to apply tension on the dynamic support toward the second side when the lace is tightened.

2. The upper of claim **1**, wherein the dynamic support is a first dynamic support, the upper further includes a second dynamic support coupled to the second side, the second dynamic support extends across the throat from the second side to the first side, the opening is a first opening, the upper body defines a second opening extending through the first side, the second dynamic support extends through the second opening formed in the first side, and the lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the first side when the lace is tightened.

3. The upper of claim **1**, wherein the dynamic support is attached to the upper body at a bite line of the article of footwear.

4. The upper of claim **3**, wherein the dynamic support includes a first support end and a second support end opposite the first support end, the first support end is attached to the upper body at the bite line of the article of footwear, the second support end defines a loop configured to receive the lace, and the loop receives the lace to apply tension on the dynamic support toward the second side when the lace is tightened.

5. The upper of claim **1**, wherein the upper body includes an outer layer and an inner layer coupled to the outer layer, and the dynamic support is disposed between the inner layer and the outer layer.

6. The upper of claim **5**, wherein the opening extends through the outer layer of the upper body.

7. The upper of claim **6**, wherein the upper body defines a first plurality of eyelets and a second plurality of eyelets, the first plurality of eyelets is disposed on the first side, the second plurality of eyelets is disposed on the second side, the first plurality of eyelets and the second plurality of eyelets extend through the outer layer, the first plurality of eyelets and the second plurality of eyelets are sized to receive the lace, the lace extends across the throat and through the first plurality of eyelets and the second plurality of eyelets, the first plurality of eyelets is aligned along a first eyelet axis, and the second plurality of eyelets is aligned along a second eyelet axis.

8. The upper of claim **7**, wherein the opening is spaced apart from the second eyelet axis along a transverse direction.

9. The upper of claim **8**, wherein the opening is larger than each of the first plurality of eyelets and the second plurality of eyelets.

10. The upper of claim **1**, wherein the dynamic support is a first dynamic support, the upper further includes a second dynamic support coupled to the second side, the second dynamic support extends across the throat from the second side to the first side, the opening is a first opening, the upper body defines a second opening extending through the first side, the second dynamic support extends through the second opening formed in the first side, the lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the first side when the lace is tightened, each of the first dynamic support and the second dynamic support includes a first support end and a second support end opposite the first support end, the first support end is attached to the upper body at a bite line of the article of footwear, the second support end defines a loop configured to receive the lace, and the loop receives the lace to apply tension on each of the first dynamic support and the second dynamic support toward the second side and the first side, respectively, when the lace is tightened.

11. An article of footwear, comprising:

a sole structure;

an upper coupled to the sole structure, the article of footwear having a bite line at an interface of the sole structure and the upper, wherein the upper includes:

an upper body having a first side and a second side opposite the first side, the upper body defining a throat between the first side and the second side, and the upper body defining an opening extending through the second side;

a lace extending across the throat between the first side and the second side;

a dynamic support coupled to the upper body at the first side, the dynamic support extending across the throat from the first side to the second side, and the dynamic support extending through the opening formed in the second side; and

wherein the lace is attached to the dynamic support at the second side to apply tension on the dynamic support toward the second side when the lace is tightened.

12. The article of footwear of claim **11**, wherein the dynamic support is a first dynamic support, the upper further includes a second dynamic support coupled to the second side, the second dynamic support extends across the throat from the second side to the first side, the opening is a first opening, the upper body defines a second opening extending through the first side, the second dynamic support extends through the second opening formed in the first side, and the lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the first side when the lace is tightened.

13. The article of footwear of claim **11**, wherein the dynamic support is attached to the upper body at the bite line of the article of footwear.

14. The article of footwear of claim **13**, wherein the dynamic support includes a first support end and a second support end opposite the first support end, the first support end is attached to the upper body at the bite line of the article of footwear, the second support end defines a loop configured to receive the lace, and the loop receives the lace to apply tension on the dynamic support toward the first side when the lace is tightened.

15. The article of footwear of claim **11**, wherein the upper body includes an outer layer and an inner layer coupled to the outer layer, and the dynamic support is disposed between the inner layer and the outer layer.

16. The article of footwear of claim **15**, wherein the opening extends through the outer layer of the upper body.

17. The article of footwear of claim **16**, wherein the upper body defines a first plurality of eyelets and a second plurality of eyelets, the first plurality of eyelets is disposed on the first side, the second plurality of eyelets is disposed on the second side, the first plurality of eyelets and the second

plurality of eyelets extend through the outer layer, the first plurality of eyelets and the second plurality of eyelets are sized to receive the lace, the lace extends across the throat and through the first plurality of eyelets and the second plurality of eyelets, the first plurality of eyelets is aligned along a first eyelet axis, and the second plurality of eyelets is aligned along a second eyelet axis.

18. The article of footwear of claim **17**, wherein the opening is spaced apart from the second eyelet axis along a transverse direction.

19. The article of footwear of claim **18**, wherein the opening is larger than each of the first plurality of eyelets and the second plurality of eyelets.

20. The article of footwear of claim **11**, wherein the dynamic support is a first dynamic support, the upper further includes a second dynamic support coupled to the second side, the second dynamic support extends across the throat from the second side to the first side, the opening is a first opening, the upper body defines a second opening extending through the first side, the second dynamic support extends through the second opening formed in the first side, the lace is attached to the second dynamic support at the first side to apply tension on the second dynamic support toward the second side when the lace is tightened, each of the first dynamic support and the second dynamic support includes a first support end and a second support end opposite the first support end, the first support end is attached to the upper body at the bite line of the article of footwear, and the second support end defines a loop configured to receive the lace, and the loop receives the lace to apply tension on each of the first dynamic support and the second dynamic support toward the first side and the second side, respectively, when the lace is tightened.

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