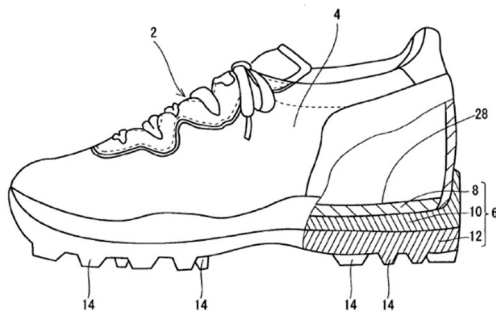


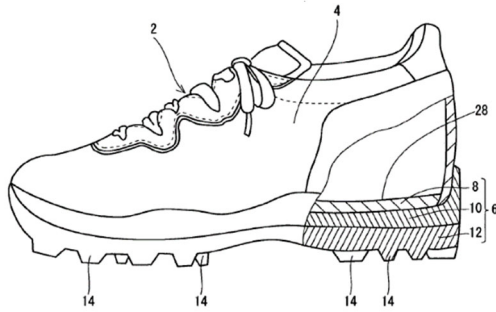
EXHIBIT K – U.S. Patent No. 11,510,456 in View of U.S. Patent Pub. No. 2007/0107258

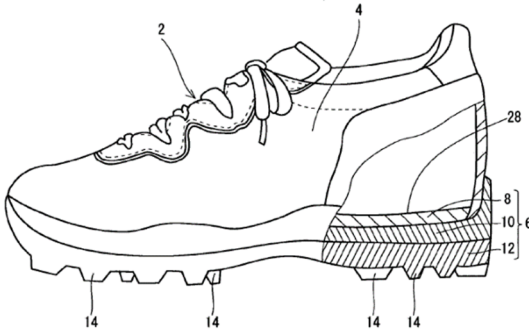
U.S. Patent Pub. No. 2007/0107258 (the “’258 publication”) published on May 17, 2007. It therefore constitutes prior art under at least pre-AIA 35 U.S.C. § 102(b). As shown below, the ’258 publication patent anticipates and/or renders obvious claims 1-5, 7, 9-15, and 17 of US Patent 11,510,456. To the extent Athalonz contends the ’258 publication does not anticipate a particular claim, the ’258 publication also renders the claim obvious for the reasons discussed below.

These invalidity contentions are based on Under Armour’s present understanding of the asserted claims and Athalonz’s apparent construction of the claims in its September 14, 2023 Disclosure of Asserted Claims and Infringement Contentions, which is deficient at least insofar as it fails to cite any documents or identify accused structures, acts, or materials in the Accused Products with particularity. Under Armour does not agree with Athalonz’s application of the claims, or that the claims satisfy the requirements of 35 U.S.C. § 112. Under Armour’s contentions herein are not, and should in no way be seen as, admissions or adoptions as to any particular claim scope or construction, or as any admission that any particular element is met by any accused product in any particular way. Under Armour objects to any attempt to imply claim construction from this chart. Under Armour’s prior art invalidity contentions are made in a variety of alternatives and do not represent Under Armour’s agreement or view as to the meaning, definiteness, written description support for, or enablement of any claim contained therein.

U.S. Patent No. 11,510,456	U.S. Patent Pub. No. 2007/0107258
1[pre]. An athletic shoe comprises:	The ’258 publication discloses an athletic shoe.  Fig. 1

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	“The present invention relates to shoes suitable for golf, tennis, squash, field hockey, basketball, aerobic exercise or the like.” [0003]. “A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].
1[a] an upper section; and	The ’258 publication discloses an upper section. Fig. 1 “The present invention relates to shoes suitable for golf, tennis, squash, field hockey, basketball, aerobic exercise or the like.” ’258 publication, [0003]. “A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].

U.S. Patent No. 11,510,456	U.S. Patent Pub. No. 2007/0107258
1[b] a sole section coupled to the upper section, wherein the sole section includes:	The '258 publication discloses a sole section coupled to the upper section.  Fig. 1 “The present invention relates to shoes suitable for golf, tennis, squash, field hockey, basketball, aerobic exercise or the like.” ’258 publication, [0003]. “A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].
1[c] a heel platform having a first height that is substantial uniform from an inner edge of the sole section to an outer edge of the sole section, wherein the heel platform is constructed of a first material; and	The ’258 publication discloses a heel platform having a first height that is substantial uniform from an inner edge of the sole section to an outer edge of the sole section, wherein the heel platform is constructed of a first material.

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	 Fig. 1

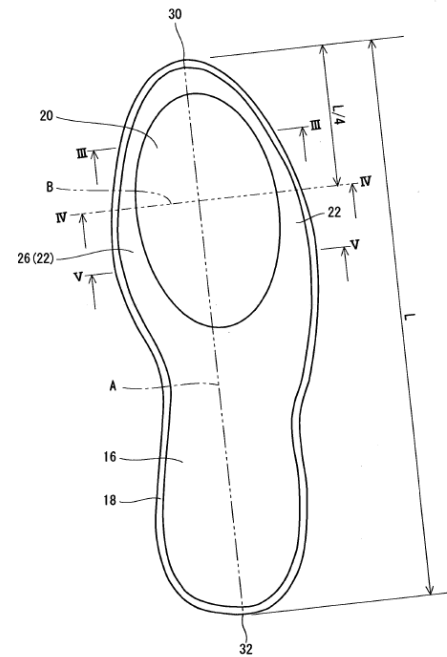
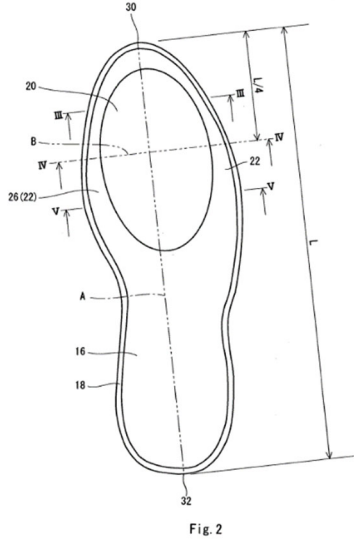


Fig. 2

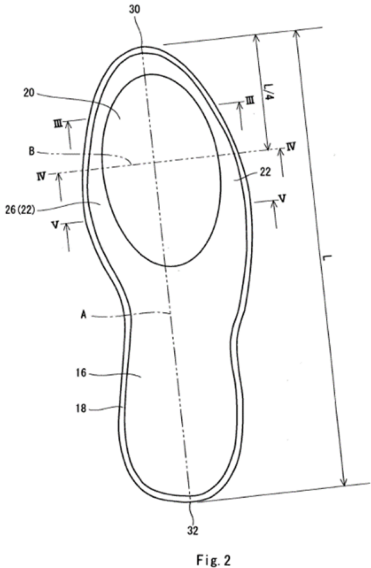
“As shown in FIG. 2 to FIG. 5, the midsole 10 has a base 16 and a side wall 18 which is located on the outer edge of this base 16. This midsole 10 is designed for a right foot. The shape of the midsole for a left foot is a mirror-reversed shape of the shape illustrated in FIG. 2. In FIG. 3 to FIG. 5, the left side direction indicates an inside direction and the right side direction indicates an outside direction.” ’258 publication, [0033].

“A chain double-dashed line designated by a reference numeral A in FIG. 2 is a longitudinal line of the midsole 10. The longitudinal line A is the longest segment that can be drawn within a contour of the midsole 10. The longitudinal line A extends from the tiptoe end 30 to the heel end 32. In FIG. 2, the length of the longitudinal line A is designated by a reference numeral L. A chain double-dashed line designated by a reference numeral B in FIG. 2 is a lateral line. The lateral line B is at right angles to the longitudinal line A. The distance from the tiptoe end 30 to the lateral line B is (L/4). The lateral line B passes through the low elastic part 20. In other words, the inclined surface 24 is located at the place of 25% of the distance L from

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1[d] a forefoot platform juxtaposed to the heel platform, wherein the forefoot platform is constructed of a second material having a gradient compression factor, wherein, when the athletic shoe is worn by an athlete and weight of the athlete is applied to the athlete shoe, the second material compresses to a first level near an outer edge of the sole section and the second material compresses to a second level near an inner edge of the sole section, wherein the second level of compression is greater than the first level of compression.	The '258 publication discloses a forefoot platform juxtaposed to the heel platform, wherein the forefoot platform is constructed of a second material having a gradient compression factor, wherein, when the athletic shoe is worn by an athlete and weight of the athlete is applied to the athlete shoe, the second material compresses to a first level near an outer edge of the sole section and the second material compresses to a second level near an inner edge of the sole section, wherein the second level of compression is greater than the first level of compression. 

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	Fig. 3 “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036]. “Furthermore, this midsole 10 has an inclined surface 24. The inclined surface 24 forms a part of a boundary between the low elastic part 20 and the high elastic part 22. The inclined surface 24 is inclined along the horizontal directions. In this embodiment, the inclined surface 24 is inclined upward from the left (the inside) to the right (the outside). The low elastic part 20 is located on the upper side of the inclined surface 24. The low elastic part 20 is located to the inside of the inclined surface 24. The high elastic part 22 is located to the lower side of the inclined surface 24. The high elastic part 22 is located to the outside of the inclined surface 24. The high elastic part 22 is also located to the inside of the low elastic part 20. A high elastic part 22 which is located to the inside of the low elastic part 20 is hereinafter referred to as “inner high elastic part 26′. The thickness of the low elastic part 20 becomes gradually larger along the inclined surface 24 from the outside to the inside. The thickness of the high elastic part 22 becomes gradually larger along the inclined Surface 24 from the inside to the outside.” ’258 publication, [0037]. “When a golf player wears these golf shoes 2 and the body weight of the golf player is applied to the bottom part 6, this midsole 10 is compressed. Since the thickness of the low elastic part 20 is larger in the inside, the inside compression deformation is larger. Since the thickness of the high elastic part 22 is larger in the outside, outside compression deformation is smaller. In this midsole 10, applying the body weight generates unbalanced deformation. Deformation of the midsole 10 displaces the position of an upper surface 28 (FIG.

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	1) of the insole 8. The downward displacement of the upper surface 28 in the inside is larger than the downward displacement of the upper surface 28 in the outside. The insole 8 inclines upward from the inside to the outside. The foot of a golf player also inclines upward from the inside to the outside. The body weight of a golf player is mainly applied to the inside. As mentioned above, when a golf player swings, the golf player kicks the ground with the inside of the kicking foot. Since the foot is inclined, the golf player easily transfers the force to the ground. This midsole 10 is suitable for the right foot of a right-handed golf player. These golf shoes 2 contribute to generation of high head speed. The large head speed generates a long flight distance.” ’258 publication, [0038].
2. The athletic shoe of claim 1, wherein the forefoot section comprises: a mid-foot section; and a toe section proximal to the mid-foot section.	The ’258 publication discloses a mid-foot section and a toe section proximal to the mid-foot section. Fig. 1

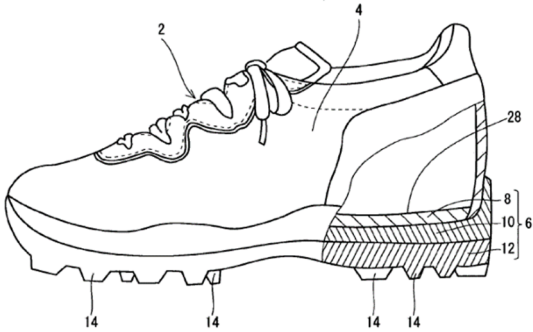
U.S. Patent No. 11,510,456	U.S. Patent Pub. No. 2007/0107258
	 Fig. 2 “A chain double-dashed line designated by a reference numeral A in FIG. 2 is a longitudinal line of the midsole 10. The longitudinal line A is the longest segment that can be drawn within a contour of the midsole 10. The longitudinal line A extends from the tiptoe end 30 to the heel end 32. In FIG. 2, the length of the longitudinal line A is designated by a reference numeral L. A chain double-dashed line designated by a reference numeral B in FIG. 2 is a lateral line. The lateral line B is at right angles to the longitudinal line A. The distance from the tiptoe end 30 to the lateral line B is (L/4). The lateral line B passes through the low elastic part 20. In other words, the inclined surface 24 is located at the place of 25% of the distance L from the tiptoe end 30 to the heel end 32 along the longitudinal line A. The position to which the maximum loads are applied during swinging is the vicinity of the ball of the thumb. The inclined surface 24 is located on the above-mentioned position, which allows a golf player to transfer the force to the ground easily. The length L is from 150 mm to 320 mm in general.” ’258 publication, [0046].
3. The athletic shoe of claim 1, wherein the second material comprises:	The ’258 publication discloses a second material comprising a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor.

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a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor.	Fig. 2 Fig. 3 “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may

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	comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036]. “Furthermore, this midsole 10 has an inclined surface 24. The inclined surface 24 forms a part of a boundary between the low elastic part 20 and the high elastic part 22. The inclined surface 24 is inclined along the horizontal directions. In this embodiment, the inclined surface 24 is inclined upward from the left (the inside) to the right (the outside). The low elastic part 20 is located on the upper side of the inclined surface 24. The low elastic part 20 is located to the inside of the inclined surface 24. The high elastic part 22 is located to the lower side of the inclined surface 24. The high elastic part 22 is located to the outside of the inclined surface 24. The high elastic part 22 is also located to the inside of the low elastic part 20. A high elastic part 22 which is located to the inside of the low elastic part 20 is hereinafter referred to as “inner high elastic part 26”. The thickness of the low elastic part 20 becomes gradually larger along the inclined surface 24 from the outside to the inside. The thickness of the high elastic part 22 becomes gradually larger along the inclined surface 24 from the inside to the outside.” ’258 publication, [0037]. “When a golf player wears these golf shoes 2 and the body weight of the golf player is applied to the bottom part 6, this midsole 10 is compressed. Since the thickness of the low elastic part 20 is larger in the inside, the inside compression deformation is larger. Since the thickness of the high elastic part 22 is larger in the outside, outside compression deformation is smaller. In this midsole 10, applying the body weight generates unbalanced deformation. Deformation of the midsole 10 displaces the position of an upper surface 28 (FIG. 1) of the insole 8. The downward displacement of the upper surface 28 in the inside is larger than the downward displacement of the upper surface 28 in the outside. The insole 8 inclines upward from the inside to the outside. The foot of a golf player also inclines upward from the inside to the outside. The body weight of a golf player is mainly applied to the inside. As mentioned above, when a golf player swings, the golf player kicks the ground with the inside of the kicking foot. Since the foot is inclined, the golf player easily transfers the force to the ground. This midsole 10 is suitable for the right foot of a right-handed golf player. These golf shoes 2 contribute to generation of high head speed. The large head speed generates a long flight distance.” ’258 publication, [0038]. To the extent that the ’258 publication does not expressly or inherently disclose a sole section wherein the second material comprises a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor it would have been obvious to a person of ordinary skill in the art at the time of the alleged invention of the ’456 patent in light of the knowledge, experience, training, and skill

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	of a person of ordinary skill in the art at the time of the alleged invention. In addition, it would have been obvious in light of this reference in combination with the '428 patent because the references both provide teachings in the field of footwear design, both seek to solve similar problems and the results of the combinations would have been predictable to one of ordinary skill in the art. The combination would be nothing more than the use of known components to improve a similar apparatus in the same way. One of skill in the art would have been motivated to do so for the reasons identified in the '428 patent. For example, the use of a single material to provide variable compressibility offers several advantages over use of two separate materials. It is simpler and more convenient, eliminates subsequent problems of the interconnection of different sole elements, and the complete sole element can be finished in a single production step.
4. The athletic shoe of claim 3, wherein the resilient material comprises one or more of: a rubber, a gel, a foam, a synthetic material.	The '258 publication discloses a resilient material comprising one or more of a rubber, a gel, a foam, or a synthetic material. "The midsole 10 comprises a polymer form including air bubbles. A typical base polymer of the midsole 10 is an ethylene-vinyl acetate (EVA). A vinyl acetate content of EVA is preferably 10 mass % or more and more preferably 15mass % or more. The vinyl acetate content of EVA is preferably 40 mass % or less, more preferably 30 mass % or less and particularly preferably 25 mass % or less. It is preferable that an EVA and a polyolefin are used in combination as a base polymer for the midsole. The polyolefin contributes to shock absorbability and rebound performance. From this point, the amount of polyolefin to the total amount of the base polymer is preferably 5 mass % or more and more preferably 10 mass % or more. From the cost and adhesive performance standpoints, the amount of polyolefin is preferably 80 mass % or less, more preferably 70 mass % or less and particularly preferably 15 mass % or less. The preferable polyolefin include an ethylene-octane copolymer, an ethylene-butene copolymer, polypropylene and a polyethylene." '258 publication, [0034]. "By applying large expansion rate to the low elastic part 20 and small expansion rate to the high elastic part 22, a difference between elastic moduli can be achieved. By using a base polymer for the high elastic part 22 and another base polymer for the low elastic part 20, a difference between elastic moduli can be achieved. By adding an amount of an additive agent which is different from the amount of the high elastic part 22 into the low elastic part 20, a difference between elastic moduli can be achieved. By mixing an additive agent into the low elastic part 20 and another additive agent into the high elastic part 22, a difference between elastic moduli can be achieved." '258 publication, [0044].

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	“This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036]. “Furthermore, this midsole 10 has an inclined surface 24. The inclined surface 24 forms a part of a boundary between the low elastic part 20 and the high elastic part 22. The inclined surface 24 is inclined along the horizontal directions. In this embodiment, the inclined surface 24 is inclined upward from the left (the inside) to the right (the outside). The low elastic part 20 is located on the upper side of the inclined surface 24. The low elastic part 20 is located to the inside of the inclined surface 24. The high elastic part 22 is located to the lower side of the inclined surface 24. The high elastic part 22 is located to the outside of the inclined surface 24. The high elastic part 22 is also located to the inside of the low elastic part 20. A high elastic part 22 which is located to the inside of the low elastic part 20 is hereinafter referred to as “inner high elastic part 26”. The thickness of the low elastic part 20 becomes gradually larger along the inclined surface 24 from the outside to the inside. The thickness of the high elastic part 22 becomes gradually larger along the inclined Surface 24 from the inside to the outside.” ’258 publication, [0037]. “When a golf player wears these golf shoes 2 and the body weight of the golf player is applied to the bottom part 6, this midsole 10 is compressed. Since the thickness of the low elastic part 20 is larger in the inside, the inside compression deformation is larger. Since the thickness of the high elastic part 22 is larger in the outside, outside compression deformation is smaller. In this midsole 10, applying the body weight generates unbalanced deformation. Deformation of the midsole 10 displaces the position of an upper surface 28 (FIG. 1) of the insole 8. The downward displacement of the upper surface 28 in the inside is larger than the downward displacement of the upper surface 28 in the outside. The insole 8 inclines upward from the inside to the outside. The foot of a golf player also inclines upward from the inside to the outside. The body weight of a golf player is mainly applied to the inside. As mentioned above, when a golf player swings, the golf player kicks the ground with the inside of the kicking foot. Since the foot is inclined, the golf player easily transfers the force to the ground. This midsole 10 is suitable for the right foot of a right-handed golf player. These golf shoes 2 contribute to generation of high head speed. The large head speed generates a long flight distance.” ’258 publication, [0038].
7. The athletic shoe of claim 1, wherein the heel	The ’258 publication discloses a heel platform comprising a first material having a first compression factor.

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platform further comprises: the first material having a first compression factor.	 Fig. 1

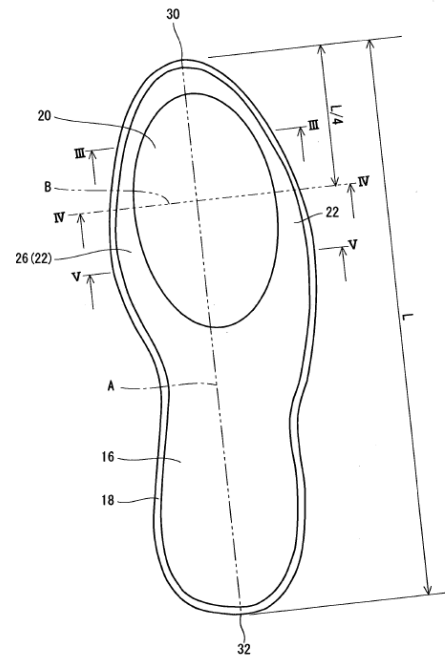
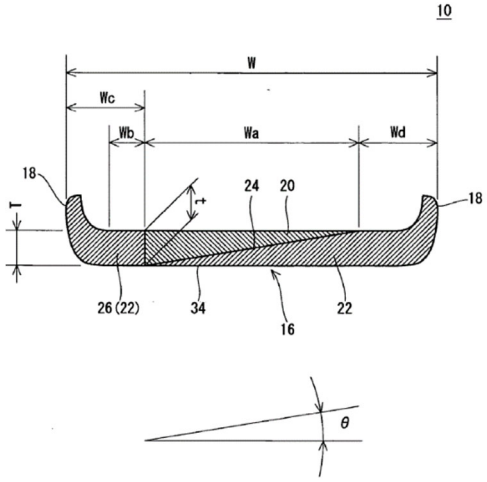
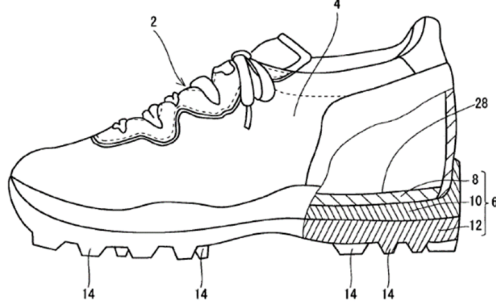
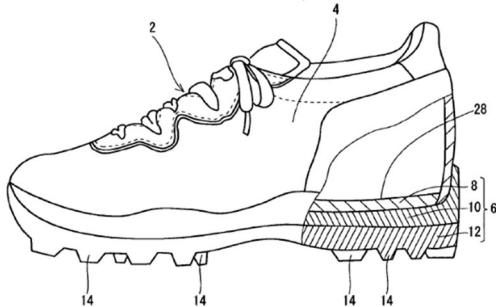


Fig. 2

“As shown in FIG. 2 to FIG. 5, the midsole 10 has a base 16 and a side wall 18 which is located on the outer edge of this base 16. This midsole 10 is designed for a right foot. The shape of the midsole for a left foot is a mirror-reversed shape of the shape illustrated in FIG. 2. In FIG. 3 to FIG. 5, the left side direction indicates an inside direction and the right side direction indicates an outside direction.” ’258 publication, [0033].

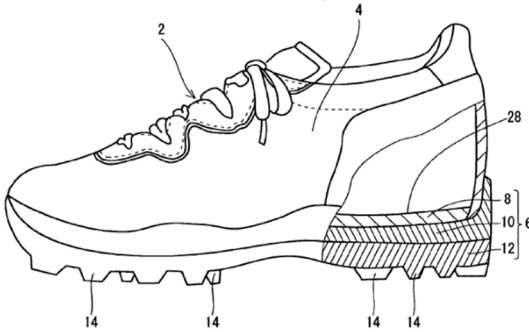
“A chain double-dashed line designated by a reference numeral A in FIG. 2 is a longitudinal line of the midsole 10. The longitudinal line A is the longest segment that can be drawn within a contour of the midsole 10. The longitudinal line A extends from the tiptoe end 30 to the heel end 32. In FIG. 2, the length of the longitudinal line A is designated by a reference numeral L. A chain double-dashed line designated by a reference numeral B in FIG. 2 is a lateral line. The lateral line B is at right angles to the longitudinal line A. The distance from the tiptoe end 30 to the lateral line B is (L/4). The lateral line B passes through the low elastic part 20. In other words, the inclined surface 24 is located at the place of 25% of the distance L from

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	the tiptoe end 30 to the heel end 32 along the longitudinal line A. The position to which the maximum loads are applied during swinging is the vicinity of the ball of the thumb. The inclined surface 24 is located on the above-mentioned position, which allows a golf player to transfer the force to the ground easily. The length L is from 150 mm to 320 mm in general.” ’258 publication, [0046].  Fig. 4 “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036].
9. The athletic shoe of claim 1, wherein the sole section comprises one or more of: an insole; a mid-sole; and	The ’258 publication discloses a sole section comprising one or more of: an insole, a mid-sole; and an out-sole.

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an out-sole.	 Fig. 1 “A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].
10[pre]. An athletic shoe comprises:	The ’258 publication discloses an athletic shoe. “The present invention relates to shoes suitable for golf, tennis, squash, field hockey, basketball, aerobic exercise or the like.” ’258 publication, [0003].  Fig. 1

U.S. Patent No. 11,510,456	U.S. Patent Pub. No. 2007/0107258
	“A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].
10[a] an upper section; and	The ’258 publication discloses an upper section. “The present invention relates to shoes suitable for golf, tennis, squash, field hockey, basketball, aerobic exercise or the like.” ’258 publication, [0003]. Fig. 1 “A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].
10[b] a sole section coupled to the upper	The ’258 publication discloses a sole section coupled to the upper section.

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section, wherein the sole section includes:	“The present invention relates to shoes suitable for golf, tennis, squash, field hockey, basketball, aerobic exercise or the like.” ’258 publication, [0003]. Fig. 1 “A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].
10[c] a heel platform having a first height that is substantial uniform from an inner edge of the sole section to an outer edge of the sole section, wherein the heel platform is constructed of a first material; and	The ’258 publication discloses a heel platform having a first height that is substantial uniform from an inner edge of the sole section to an outer edge of the sole section, wherein the heel platform is constructed of a first material.

U.S. Patent No. 11,510,456	U.S. Patent Pub. No. 2007/0107258
	 Fig. 1

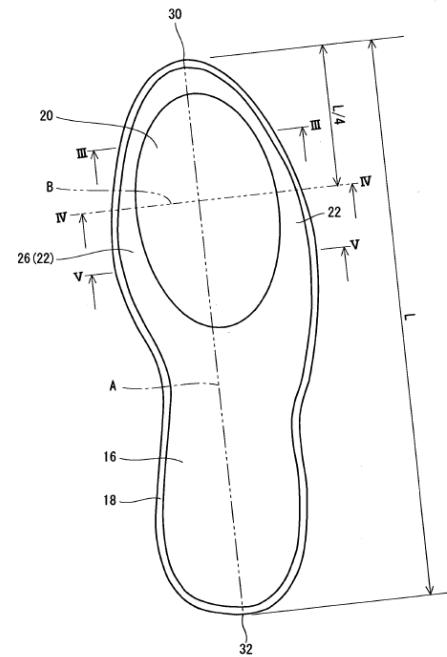
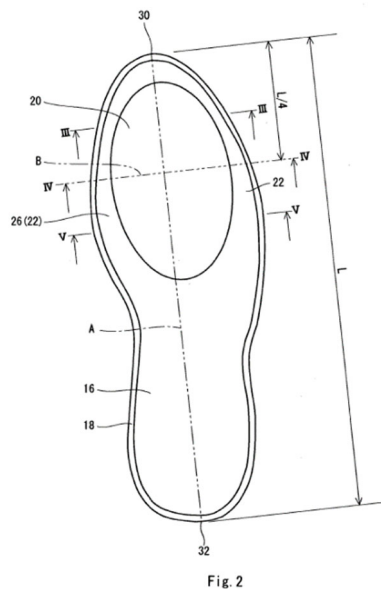


Fig. 2

“As shown in FIG. 2 to FIG. 5, the midsole 10 has a base 16 and a side wall 18 which is located on the outer edge of this base 16. This midsole 10 is designed for a right foot. The shape of the midsole for a left foot is a mirror-reversed shape of the shape illustrated in FIG. 2. In FIG. 3 to FIG. 5, the left side direction indicates an inside direction and the right side direction indicates an outside direction.” ’258 publication, [0033]

“A chain double-dashed line designated by a reference numeral A in FIG. 2 is a longitudinal line of the midsole 10. The longitudinal line A is the longest segment that can be drawn within a contour of the midsole 10. The longitudinal line A extends from the tiptoe end 30 to the heel end 32. In FIG. 2, the length of the longitudinal line A is designated by a reference numeral L. A chain double-dashed line designated by a reference numeral B in FIG. 2 is a lateral line. The lateral line B is at right angles to the longitudinal line A. The distance from the tiptoe end 30 to the lateral line B is $(L/4)$. The lateral line B passes through the low elastic part 20. In other words, the inclined surface 24 is located at the place of 25% of the distance L from

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	the tiptoe end 30 to the heel end 32 along the longitudinal line A. The position to which the maximum loads are applied during swinging is the vicinity of the ball of the thumb. The inclined surface 24 is located on the above-mentioned position, which allows a golf player to transfer the force to the ground easily. The length L is from 150 mm to 320 mm in general.” ’258 publication, [0046] Fig. 4 “The length designated by both-oriented arrow T in FIG. 4 is the thickness of the midsole 10. The thickness T is measured on a cross-section surface along the lateral line B. The thickness T is the maximum thickness among the parts except for the side wall 18. The thickness T is preferably 2 mm or more and more preferably 5 mm or more. The thickness T is preferably 25 mm or less, more preferably 20 mm or less and particularly preferably 15 mm or less.” ’258 publication, [0052]. “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036].

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10[d] a forefoot platform juxtaposed to the heel platform, wherein the forefoot platform is constructed to have a first level of compression proximal to the outer edge of the shoe and a second level of compression proximal to an inner edge of the shoe, wherein the second level of compression is greater than the first level of compression.	The '258 publication discloses a forefoot platform juxtaposed to the heel platform, wherein the forefoot platform is constructed to have a first level of compression proximal to the outer edge of the shoe and a second level of compression proximal to an inner edge of the shoe, wherein the second level of compression is greater than the first level of compression. 

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	Fig. 3 “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036]. “Furthermore, this midsole 10 has an inclined surface 24. The inclined surface 24 forms a part of a boundary between the low elastic part 20 and the high elastic part 22. The inclined surface 24 is inclined along the horizontal directions. In this embodiment, the inclined surface 24 is inclined upward from the left (the inside) to the right (the outside). The low elastic part 20 is located on the upper side of the inclined surface 24. The low elastic part 20 is located to the inside of the inclined surface 24. The high elastic part 22 is located to the lower side of the inclined surface 24. The high elastic part 22 is located to the outside of the inclined surface 24. The high elastic part 22 is also located to the inside of the low elastic part 20. A high elastic part 22 which is located to the inside of the low elastic part 20 is hereinafter referred to as “inner high elastic part 26’”. The thickness of the low elastic part 20 becomes gradually larger along the inclined surface 24 from the outside to the inside. The thickness of the high elastic part 22 becomes gradually larger along the inclined Surface 24 from the inside to the outside.” ’258 publication, [0037]. “When a golf player wears these golf shoes 2 and the body weight of the golf player is applied to the bottom part 6, this midsole 10 is compressed. Since the thickness of the low elastic part 20 is larger in the inside, the inside compression deformation is larger. Since the thickness of the high elastic part 22 is larger in the outside, outside compression deformation is smaller. In this midsole 10, applying the body weight generates

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	unbalanced deformation. Deformation of the midsole 10 displaces the position of an upper surface 28 (FIG. 1) of the insole 8. The downward displacement of the upper surface 28 in the inside is larger than the downward displacement of the upper surface 28 in the outside. The insole 8 inclines upward from the inside to the outside. The foot of a golf player also inclines upward from the inside to the outside. The body weight of a golf player is mainly applied to the inside. As mentioned above, when a golf player swings, the golf player kicks the ground with the inside of the kicking foot. Since the foot is inclined, the golf player easily transfers the force to the ground. This midsole 10 is suitable for the right foot of a right-handed golf player. These golf shoes 2 contribute to generation of high head speed. The large head speed generates a long flight distance.” ’258 publication, [0038]. The diagram shows a cross-section of a midsole. It is divided into two main regions: a low elastic part 136 on the left and a high elastic part 138 on the right. The boundary between them is a vertical line. Within the high elastic part 138, there is an inner high elastic part 140 (138) which is shaded with diagonal lines. The entire midsole is shown within a shoe outline. Fig. 15 “By performing the same procedures as those of Example 1 except for designing a cross-sectional shape of the midsole as shown in FIG. 15, a golf shoe according to Example 11 was obtained. This midsole has a low elastic part 136 and a high elastic part 138. The boundary between the low elastic part 136 and the high elastic part 138 is perpendicularly extended. The high elastic part 138 includes an inner high elastic part 140.” ’258 publication, [0083].
11. The athletic shoe of claim 10, wherein the forefoot section comprises: a mid-foot section; and a toe section proximal to the mid-foot section.	The ’258 publication discloses a mid-foot section and a toe section proximal to the mid-foot section.

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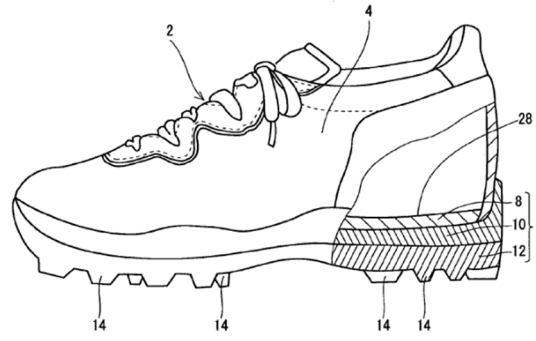


Fig. 1

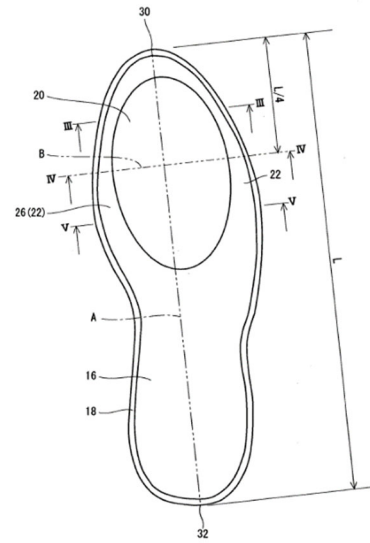
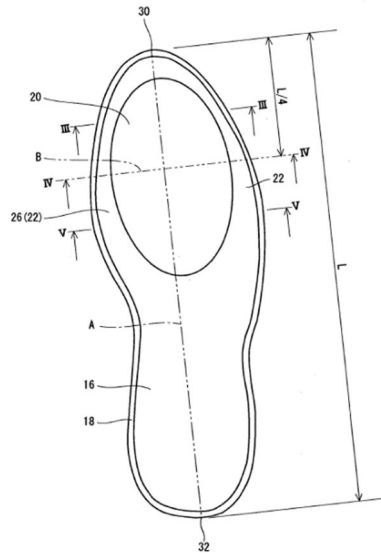


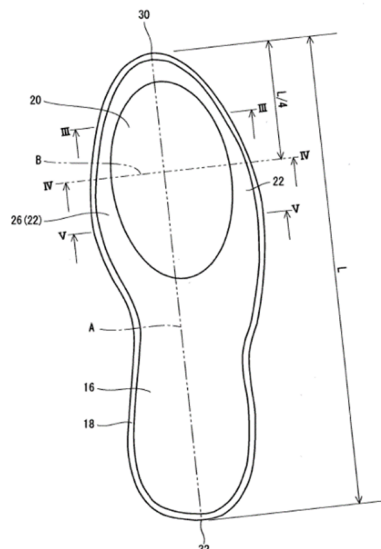
Fig. 2

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	“A chain double-dashed line designated by a reference numeral A in FIG. 2 is a longitudinal line of the midsole 10. The longitudinal line A is the longest segment that can be drawn within a contour of the midsole 10. The longitudinal line A extends from the tiptoe end 30 to the heel end 32. In FIG. 2, the length of the longitudinal line A is designated by a reference numeral L. A chain double-dashed line designated by a reference numeral B in FIG. 2 is a lateral line. The lateral line B is at right angles to the longitudinal line A. The distance from the tiptoe end 30 to the lateral line B is (L/4). The lateral line B passes through the low elastic part 20. In other words, the inclined surface 24 is located at the place of 25% of the distance L from the tiptoe end 30 to the heel end 32 along the longitudinal line A. The position to which the maximum loads are applied during swinging is the vicinity of the ball of the thumb. The inclined surface 24 is located on the above-mentioned position, which allows a golf player to transfer the force to the ground easily. The length L is from 150 mm to 320 mm in general.” ’258 publication, [0046].
12. The athletic shoe of claim 10, wherein the forefoot platform comprises: a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor.	The ’258 publication discloses a second material comprising a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor.  Fig. 2

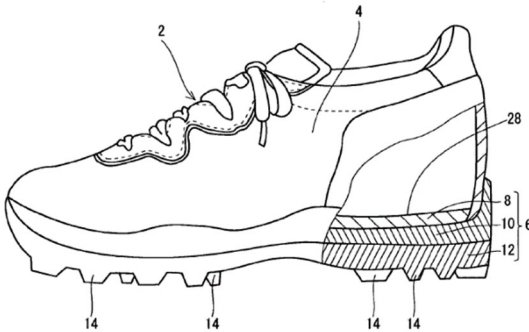
U.S. Patent No. 11,510,456	U.S. Patent Pub. No. 2007/0107258
	Fig. 3 “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036]. “Furthermore, this midsole 10 has an inclined surface 24. The inclined surface 24 forms a part of a boundary between the low elastic part 20 and the high elastic part 22. The inclined surface 24 is inclined along the horizontal directions. In this embodiment, the inclined surface 24 is inclined upward from the left (the inside) to the right (the outside). The low elastic part 20 is located on the upper side of the inclined surface 24. The low elastic part 20 is located to the inside of the inclined surface 24. The high elastic part 22 is located to the lower side of the inclined surface 24. The high elastic part 22 is located to the outside of the inclined surface 24. The high elastic part 22 is also located to the inside of the low elastic part 20. A high elastic part 22 which is located to the inside of the low elastic part 20 is hereinafter referred to as “inner high elastic part 26’”. The thickness of the low elastic part 20 becomes gradually larger along the inclined surface 24 from the outside to the inside. The thickness of the high elastic part 22 becomes gradually larger along the inclined Surface 24 from the inside to the outside.” ’258 publication, [0037]. “When a golf player wears these golf shoes 2 and the body weight of the golf player is applied to the bottom part 6, this midsole 10 is compressed. Since the thickness of the low elastic part 20 is larger in the inside, the inside compression deformation is larger. Since the thickness of the high elastic part 22 is larger in the outside, outside compression deformation is smaller. In this midsole 10, applying the body weight generates

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	unbalanced deformation. Deformation of the midsole 10 displaces the position of an upper surface 28 (FIG. 1) of the insole 8. The downward displacement of the upper surface 28 in the inside is larger than the downward displacement of the upper surface 28 in the outside. The insole 8 inclines upward from the inside to the outside. The foot of a golf player also inclines upward from the inside to the outside. The body weight of a golf player is mainly applied to the inside. As mentioned above, when a golf player swings, the golf player kicks the ground with the inside of the kicking foot. Since the foot is inclined, the golf player easily transfers the force to the ground. This midsole 10 is suitable for the right foot of a right-handed golf player. These golf shoes 2 contribute to generation of high head speed. The large head speed generates a long flight distance.” ’258 publication, [0038]. To the extent that the ‘258 publication does not expressly or inherently disclose a sole section wherein the second material comprises a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor it would have been obvious to a person of ordinary skill in the art at the time of the alleged invention of the ’456 patent in light of the knowledge, experience, training, and skill of a person of ordinary skill in the art at the time of the alleged invention. In addition, it would have been obvious in light of this reference in combination with the ‘428 patent because the references both provide teachings in the field of footwear design, both seek to solve similar problems and the results of the combinations would have been predictable to one of ordinary skill in the art. The combination would be nothing more than the use of known components to improve a similar apparatus in the same way. One of skill in the art would have been motivated to do so for the reasons identified in the ‘428 patent. For example, the use of a single material to provide variable compressibility offers several advantages over use of two separate materials. It is simpler and more convenient, eliminates subsequent problems of the interconnection of different sole elements, and the complete sole element can be finished in a single production step.
13. The athletic shoe of claim 12, wherein the resilient material comprises one or more of: a rubber, a gel, a foam, a synthetic material.	The ’258 publication discloses a resilient material comprising one or more of a rubber, a gel, a foam, or a synthetic material. “The midsole 10 comprises a polymer form including air bubbles. A typical base polymer of the midsole 10 is an ethylene-vinyl acetate (EVA). A vinyl acetate content of EVA is preferably 10 mass % or more and more preferably 15mass % or more. The vinyl acetate content of EVA is preferably 40 mass % or less, more preferably 30 mass % or less and particularly preferably 25 mass % or less. It is preferable that an EVA and a polyolefin are used in combination as a base polymer for the midsole. The polyolefin contributes to shock absorbability and rebound performance. From this point, the amount of polyolefin to the total amount of the

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	base polymer is preferably 5 mass % or more and more preferably 10 mass % or more. From the cost and adhesive performance standpoints, the amount of polyolefin is preferably 80 mass % or less, more preferably 70 mass % or less and particularly preferably 15 mass % or less. The preferable polyolefin include an ethylene-octane copolymer, an ethylene-butene copolymer, polypropylene and a polyethylene.” ’258 publication, [0034]. “By applying large expansion rate to the low elastic part 20 and small expansion rate to the high elastic part 22, a difference between elastic moduli can be achieved. By using a base polymer for the high elastic part 22 and another base polymer for the low elastic part 20, a difference between elastic moduli can be achieved. By adding an amount of an additive agent which is different from the amount of the high elastic part 22 into the low elastic part 20, a difference between elastic moduli can be achieved. By mixing an additive agent into the low elastic part 20 and another additive agent into the high elastic part 22, a difference between elastic moduli can be achieved.” ’258 publication, [0044].
14. The athletic shoe of claim 10, wherein the forefoot section comprises: a plurality of material configured to provide a shape of the forefoot platform and to provide the gradient compression factor.	The ’258 publication discloses a plurality of material configured to provide a shape of the forefoot platform and to provide the gradient compression factor.

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	 Fig. 2

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	Fig. 3 “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036]. “Furthermore, this midsole 10 has an inclined surface 24. The inclined surface 24 forms a part of a boundary between the low elastic part 20 and the high elastic part 22. The inclined surface 24 is inclined along the horizontal directions. In this embodiment, the inclined surface 24 is inclined upward from the left (the inside) to the right (the outside). The low elastic part 20 is located on the upper side of the inclined surface 24. The low elastic part 20 is located to the inside of the inclined surface 24. The high elastic part 22 is located to the lower side of the inclined surface 24. The high elastic part 22 is located to the outside of the inclined surface 24. The high elastic part 22 is also located to the inside of the low elastic part 20. A high elastic part 22 which is located to the inside of the low elastic part 20 is hereinafter referred to as “inner high elastic part 26’”. The thickness of the low elastic part 20 becomes gradually larger along the inclined surface 24 from the outside to the inside. The thickness of the high elastic part 22 becomes gradually larger along the inclined Surface 24 from the inside to the outside.” ’258 publication, [0037]. “When a golf player wears these golf shoes 2 and the body weight of the golf player is applied to the bottom part 6, this midsole 10 is compressed. Since the thickness of the low elastic part 20 is larger in the inside, the

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	inside compression deformation is larger. Since the thickness of the high elastic part 22 is larger in the outside, outside compression deformation is smaller. In this midsole 10, applying the body weight generates unbalanced deformation. Deformation of the midsole 10 displaces the position of an upper surface 28 (FIG. 1) of the insole 8. The downward displacement of the upper surface 28 in the inside is larger than the downward displacement of the upper surface 28 in the outside. The insole 8 inclines upward from the inside to the outside. The foot of a golf player also inclines upward from the inside to the outside. The body weight of a golf player is mainly applied to the inside. As mentioned above, when a golf player swings, the golf player kicks the ground with the inside of the kicking foot. Since the foot is inclined, the golf player easily transfers the force to the ground. This midsole 10 is suitable for the right foot of a right-handed golf player. These golf shoes 2 contribute to generation of high head speed. The large head speed generates a long flight distance.” ’258 publication, [0038].
15. The athletic shoe of claim 10, wherein the heel platform further comprises: the first material having a first compression factor.	The ’258 publication discloses a heel platform comprising a first material having a first compression factor.  Fig. 1

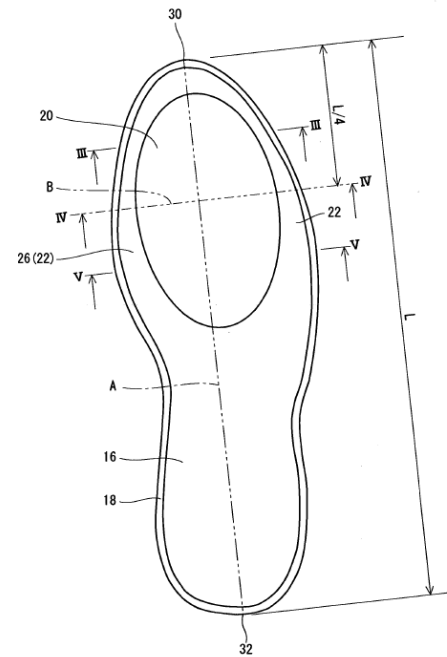
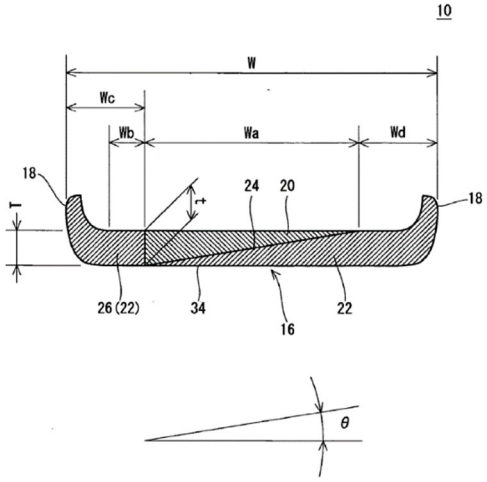


Fig. 2

“As shown in FIG. 2 to FIG. 5, the midsole 10 has a base 16 and a side wall 18 which is located on the outer edge of this base 16. This midsole 10 is designed for a right foot. The shape of the midsole for a left foot is a mirror-reversed shape of the shape illustrated in FIG. 2. In FIG. 3 to FIG. 5, the left side direction indicates an inside direction and the right side direction indicates an outside direction.” ’258 publication, [0033].

“A chain double-dashed line designated by a reference numeral A in FIG. 2 is a longitudinal line of the midsole 10. The longitudinal line A is the longest segment that can be drawn within a contour of the midsole 10. The longitudinal line A extends from the tiptoe end 30 to the heel end 32. In FIG. 2, the length of the longitudinal line A is designated by a reference numeral L. A chain double-dashed line designated by a reference numeral B in FIG. 2 is a lateral line. The lateral line B is at right angles to the longitudinal line A. The distance from the tiptoe end 30 to the lateral line B is $(L/4)$. The lateral line B passes through the low elastic part 20. In other words, the inclined surface 24 is located at the place of 25% of the distance L from

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	the tiptoe end 30 to the heel end 32 along the longitudinal line A. The position to which the maximum loads are applied during swinging is the vicinity of the ball of the thumb. The inclined surface 24 is located on the above-mentioned position, which allows a golf player to transfer the force to the ground easily. The length L is from 150 mm to 320 mm in general.” ’258 publication, [0046].  Fig. 4 “This midsole 10 has a low elastic part 20 and a high elastic part 22. The elastic modulus of the low elastic part 20 is lower than that of the high elastic part 22. When a compression load is applied to the midsole 10, the low elastic part 20 is more easily deformed than the high elastic part 22. The low elastic part 20 may comprise two (2) or more parts having different elastic moduli. The high elastic part 22 may comprise two (2) or more parts having different elastic moduli.” ’258 publication, [0036].
17. The athletic shoe of claim 10, wherein the sole section comprises one or more of: an insole; a mid-sole; and	The ’258 publication discloses a sole section comprising one or more of: an insole, a mid-sole; and an out-sole.

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an out-sole.	Fig. 1 “A golf shoe 2 illustrated in FIG. 1 comprises an upper 4 and a bottom part 6. The bottom part 6 has an insole 8, a midsole 10 and an outsole 12. The insole 8 is laminated with the midsole 10. The midsole 10 is laminated with the outsole 12. The outsole 12 has a number of projections 14 protruding downward on the lower surface. The material and structure for the upper 4 are equal to those of known upper. The material and structure for the insole 8 are equal to those of known insole. The material and structure for the outsole 12 are equal to those of known outsole.” ’258 publication, [0032].