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### (54) DUAL-LACE FOOTBALL DEVICE

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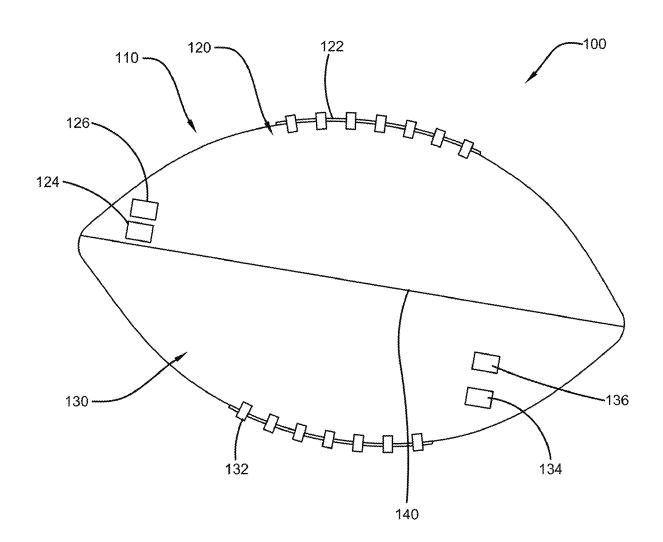
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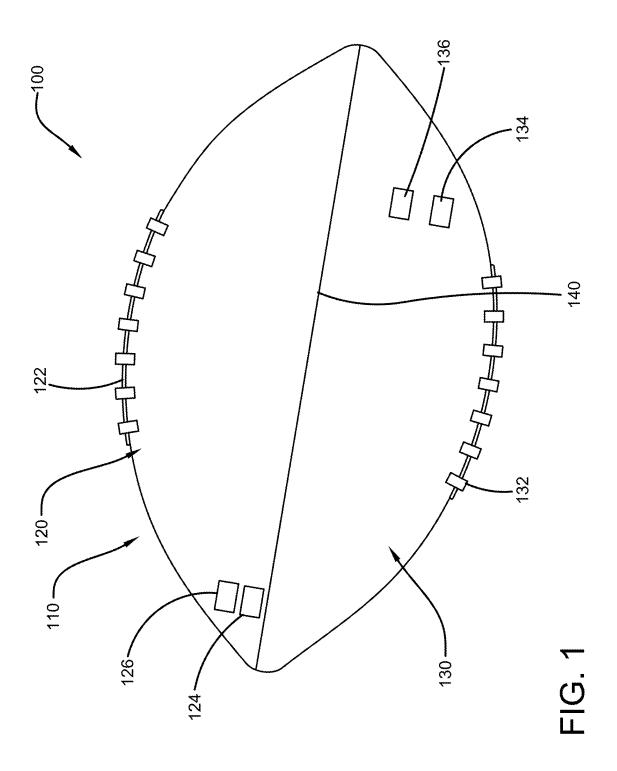
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#### (57)**ABSTRACT**

A dual-lace football device is provided. The device is comprised of a body with two halves stitched together and featuring laces on opposite sides to enhance grip and performance. The body may be constructed from various materials such as leather or synthetic composites, providing durability and moisture resistance. Each half contains at least one lace, preferably made from moisture-wicking materials, with patterns like raised ridges and grooves that improve traction and manage water displacement. The laces are further enhanced with coatings for better grip and durability. The dual-lace design offers players improved handling, control, and stability, benefiting quarterbacks, receivers, and kickers by optimizing grip during play.





### DUAL-LACE FOOTBALL DEVICE

# CROSS-REFERENCE TO RELATED APPLICATION

[0001] The present application claims priority to, and the benefit of, U.S. Provisional Application No. 63/552,324, which was filed on Feb. 12, 2024, and is incorporated herein by reference in its entirety.

### FIELD OF THE INVENTION

[0002] The present invention relates generally to the field of football. More specifically, the present invention relates to a football with a pair of laces positioned 180 degrees away from each other on the surface of a football. Accordingly, the present disclosure makes specific reference thereto. Nonetheless, it is to be appreciated that aspects of the present invention are also equally applicable to other like applications, devices, and methods of manufacture.

### BACKGROUND

[0003] Many athletes, football enthusiasts, and even professional players seek a football that can significantly enhance grip, accuracy, ball control, and overall performance on the field. Traditional football designs, while functional, often fall short of enabling players to reach their full potential, especially when executing advanced techniques like throwing perfect spirals, securing difficult catches, or delivering precise punts. These limitations can hinder both amateur and professional players from achieving the level of control and precision they desire, particularly in fast-paced or high-stakes situations. Despite ongoing innovations in sports equipment, the market still lacks a football with a design that optimally balances handling, surface dynamics, and player performance. Addressing these gaps with a football that offers superior grip and handling could revolutionize the game, providing players with an essential tool for improving both their individual skills and overall team performance. The need for such a football remains pressing and unmet, presenting a valuable opportunity for innovation in the sport.

[0004] Therefore, there exists a long-felt need in the art for an improved football. There also exists a long-felt need in the art for a dual-lace football device. More specifically, there exists a long-felt need in the art for a dual-lace football device that increases grip. Further, there exists a long-felt need in the art for a dual-lace football device that increases accuracy. In addition, there exists a long-felt need in the art for a dual-lace football device that increases ball control. Finally, there exists a long-felt need in the art for a dual-lace football device that increases overall ball performance.

[0005] The subject matter disclosed and claimed herein, in one embodiment thereof, comprises a dual-lace football device. The device is comprised of a body with two halves stitched together and featuring laces on opposite sides to enhance grip and performance. The body may be constructed from various materials such as leather or synthetic composites, providing durability and moisture resistance. Each half contains at least one lace, preferably made from moisture-wicking materials, with patterns like raised ridges and grooves that improve traction and manage water displacement. The laces are further enhanced with coatings for better grip and durability. The dual-lace design offers players

improved handling, control, and stability, benefiting quarterbacks, receivers, and kickers by optimizing grip during play.

[0006] In this manner, the dual-lace football device of the present invention accomplishes all the forgoing objectives and provides an improved football. More specifically the device increases grip. Further, the device increases accuracy and ball control. Finally, the device increases overall ball performance.

### **SUMMARY**

[0007] The following presents a simplified summary to provide a basic understanding of some aspects of the disclosed innovation. This summary is not an extensive overview, and it is not intended to identify key/critical elements or to delineate the scope thereof. Its sole purpose is to present some general concepts in a simplified form as a prelude to the more detailed description that is presented later.

[0008] The subject matter disclosed and claimed herein, in one embodiment thereof, comprises a dual-lace football device. The device is comprised of a body that serves as the main structure of a football. The body can be made from various materials, including leather, synthetic leather, composite materials, or polyurethane, offering different levels of durability, flexibility, and moisture resistance. The body is comprised of two halves connected by at least one stitch, with options such as double stitch, zigzag stitch, or lock stitch. These stitching methods are selected based on factors like material properties and performance. In some cases, the stitching is reinforced with a sealant or coating to enhance durability, especially in high-stress areas.

[0009] The first half of the body is comprised of at least one lace, designed to improve grip and handling. The lace is made from materials like rubber or synthetic fibers, such as hydrophobic silicone or polymer-based yarn, with a composite material option for added strength and flexibility. The lace features at least one pattern, which may include raised or recessed elements to optimize performance. One embodiment includes micro-grooves that channel water away from the grip area, while another uses alternating ridges and grooves to improve traction and prevent slippage. The lace may also have a specialized coating to enhance moisture resistance or tactile feedback, using high-friction materials like thermoplastic elastomers or durable resin layers.

[0010] The second half of the body is similarly comprised of at least one lace, positioned opposite the first lace. Like the first, this lace is made from moisture-wicking materials and may include a composite construction for increased durability. The lace features a pattern designed to improve grip, with options such as micro-grooves or alternating ridges and grooves. A specialized coating may be applied to enhance moisture resistance and control.

[0011] The placement of the laces on opposite sides of the football ensures an improved gripping surface, regardless of orientation. This dual-lace design enhances stability for quarterbacks, allowing for easier throws and passes. It also benefits receivers by providing multiple anchor points, reducing fumbles, and enabling quicker grip adjustments. Punters and placekickers gain a more predictable contact surface, improving control over kick trajectory and distance. [0012] Accordingly, the dual-lace football device of the present invention is particularly advantageous as it provides an improved football. More specifically the device increases

grip. Further, the device increases accuracy and ball control. Finally, the device increases overall ball performance. In this manner, the dual-lace football device overcomes the limitations of existing footballs known in the art.

[0013] To the accomplishment of the foregoing and related ends, certain illustrative aspects of the disclosed innovation are described herein in connection with the following description and the annexed drawings. These aspects are indicative, however, of but a few of the various ways in which the principles disclosed herein can be employed and are intended to include all such aspects and their equivalents. Other advantages and novel features will become apparent from the following detailed description when considered in conjunction with the drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The description refers to provided drawings in which similar reference characters refer to similar parts throughout the different views, and in which:

[0015] FIG. 1 illustrates a perspective view of one potential embodiment of a dual-lace football device of the present invention in accordance with the disclosed architecture.

### DETAILED DESCRIPTION

[0016] The innovation is now described with reference to the drawings, wherein like reference numerals are used to refer to like elements throughout. In the following description, for purposes of explanation, numerous specific details are set forth to provide a thorough understanding thereof. It may be evident, however, that the innovation can be practiced without these specific details. In other instances, wellknown structures and devices are shown in block diagram form to facilitate a description thereof. Various embodiments are discussed hereinafter. It should be noted that the figures are described only to facilitate the description of the embodiments. They are not intended as an exhaustive description of the invention and do not limit the scope of the invention. Additionally, an illustrated embodiment need not have all the aspects or advantages shown. Thus, in other embodiments, any of the features described herein from different embodiments may be combined.

[0017] As noted above, there exists a long-felt need in the art for an improved football. There also exists a long-felt need in the art for a dual-lace football device. More specifically, there exists a long-felt need in the art for a dual-lace football device that increases grip. Further, there exists a long-felt need in the art for a dual-lace football device that increases accuracy. In addition, there exists a long-felt need in the art for a dual-lace football device that increases ball control. Finally, there exists a long-felt need in the art for a dual-lace football device that increases overall ball performance.

[0018] The present invention, in one exemplary embodiment, is comprised of a dual-lace football device. The device is comprised of a body that forms the main structure of a football, made from materials such as leather, synthetic leather, composite materials, or polyurethane, offering varying degrees of durability, flexibility, and moisture resistance. The body includes two halves connected by at least one stitch, with options like double stitch, zigzag stitch, or lock stitch, selected based on material properties and perfor-

mance. In some instances, the stitching is reinforced with a sealant or coating to enhance durability, particularly in high-stress areas.

[0019] The first half of the body is comprised of at least one lace designed to improve grip and handling. This lace is made from materials like rubber or synthetic fibers, including hydrophobic silicone or polymer-based yarn, with a composite option for added strength and flexibility. The lace incorporates a pattern that may feature raised or recessed elements to optimize performance. One embodiment includes micro-grooves to channel water away from the grip area, while another utilizes alternating ridges and grooves to enhance traction and prevent slippage. The lace may also have a specialized coating for increased moisture resistance or tactile feedback, using high-friction materials like thermoplastic elastomers or durable resin layers.

[0020] The second half of the body similarly includes at least one lace, positioned opposite the first lace. This lace, made from moisture-wicking materials, may also feature composite construction for increased durability. The pattern on this lace is designed to improve grip, with options such as micro-grooves or alternating ridges and grooves. A specialized coating may be applied to enhance moisture resistance and control.

[0021] The placement of laces on opposite sides of the football ensures an improved gripping surface, regardless of orientation. This dual-lace design enhances stability for quarterbacks, making throws and passes easier, while also benefiting receivers by providing multiple anchor points to reduce fumbles and enable quicker grip adjustments. Punters and placekickers gain a more predictable contact surface, improving control over kick trajectory and distance.

[0022] Accordingly, the dual-lace football device offers enhanced grip, accuracy, and ball control, leading to overall improved performance compared to existing footballs.

[0023] Referring initially to the drawings, FIG. 1 illustrates a perspective view of one potential embodiment of a dual-lace football device 100 of the present invention in accordance with the disclosed architecture. The device 100 is comprised of a body 110, which serves as the main structure of the football. The body 110 may be made from any material commonly used in football construction, including but not limited to leather, synthetic leather, composite materials, or polyurethane. Each material offers varying levels of durability, flexibility, and moisture resistance, depending on the specific requirements of the football.

[0024] The body 110 is comprised of a first half 120 attached to a second half 130 via at least one stitch 140. Stitching options for the connection between the two halves include a standard double stitch, zigzag stitch, or lock stitch, selected based on the material properties and performance factors, such as moisture resistance, structural integrity, or aesthetic appeal. In some embodiments, stitch 140 is reinforced with a sealant or coating to protect against wear and tear, especially in areas subject to high stress, enhancing the football's durability under heavy usage.

[0025] The first half 120 is comprised of at least one lace 122, which contributes to improved grip and handling. The lace 122 is preferably made from rubber or a synthetic fiber with moisture-wicking properties, such as hydrophobic silicone or polymer-based yarn. In one embodiment, lace 122 is constructed from a composite material blending fibers for increased strength and flexibility, enabling the lace 122 to maintain its structural integrity under pressure while enhanc-

ing player handling. To further improve grip, the lace 122 is comprised of at least one pattern 124.

[0026] The pattern 124 on lace 122 includes raised or recessed elements designed to optimize performance. One embodiment of the pattern 124 consists of micro-grooves that channel water away from the central grip surface, directing moisture toward the outer edges, and keeping the primary gripping area dry. Another embodiment of the pattern 124 is comprised of alternating raised ridges and grooves, creating a textured surface that enhances traction between the player's fingers and lace 122. The raised ridges provide small, firm contact points, increasing friction to prevent slipping, while the grooves serve as moisture reservoirs. Variations in groove depth and width make it possible to manage water displacement effectively under different game conditions, including rain or sweat.

[0027] In some embodiments, lace 122 includes a specialized coating 126 to improve moisture resistance or tactile feedback. The coating 126 may be comprised of a high-friction material, such as a thermoplastic elastomer, or a durable resin layer, enhancing player control during high-performance play. The coating also adds durability to lace 122, ensuring consistent performance over extended use.

[0028] The second half 130 of body 110 is similarly comprised of at least one lace 132, positioned 180 degrees opposite lace 122 on the first half 120. Like lace 122, the lace 132 is preferably made from rubber or a synthetic fiber with moisture-wicking properties and may be constructed from a composite material for enhanced strength and flexibility. The lace 132 also features at least one pattern 134 designed to improve grip.

[0029] A pattern 134 on the lace 132 mirrors the design of pattern 124, offering options such as micro-grooves for water channeling or alternating ridges and grooves for improved traction. Raised ridges on pattern 134 provide firm contact points that increase friction, while grooves help manage moisture, preventing slippage. Groove depth and width can be adjusted to optimize water displacement in varying conditions.

[0030] In some embodiments, lace 132 includes a specialized coating 136 to enhance moisture resistance or tactile feedback. The coating 136, made from high-friction materials like thermoplastic elastomers or durable resins, further improves grip and control during gameplay.

[0031] The placement of laces 122,132 on opposite sides of body 110 ensures an enhanced gripping surface, regardless of the football's orientation during play. The dual-lace 122,132 configuration offers greater stability for quarterbacks when throwing spirals or precision passes, as rotating the ball to find an ideal lace position is no longer necessary. Additionally, running backs and receivers benefit from multiple anchor points for fingers and palms, reducing the likelihood of fumbles. Receivers can detect the laces 122, 132 sooner when catching the football, allowing for quicker grip adjustments, leading to fewer dropped passes.

[0032] Punters and placekickers also gain advantages from the dual-lace 122,132 structure, which provides a more predictable contact surface regardless of how the football is positioned on the ground. The design contributes to improved control over kick trajectory and distance, supporting more accurate and powerful kicks.

[0033] Certain terms are used throughout the following description and claims to refer to particular features or components. As one skilled in the art will appreciate,

different persons may refer to the same feature or component by different names. This document does not intend to distinguish between components or features that differ in name but not structure or function. As used herein "dual-lace football device" and "device" are interchangeable and refer to the dual-lace football device 100 of the present invention.

[0034] Notwithstanding the forgoing, the dual-lace football device 100 of the present invention and its various components can be of any suitable size and configuration as is known in the art without affecting the overall concept of the invention, provided that they accomplish the abovestated objectives. One of ordinary skill in the art will appreciate that the size, configuration, and material of the dual-lace football device 100 as shown in the FIGS. are for illustrative purposes only, and that many other sizes and shapes of the dual-lace football device 100 are well within the scope of the present disclosure. Although the dimensions of the dual-lace football device 100 are important design parameters for user convenience, the dual-lace football device 100 may be of any size, shape, and/or configuration that ensures optimal performance during use and/or that suits the user's needs and/or preferences.

[0035] Various modifications and additions can be made to the exemplary embodiments discussed without departing from the scope of the present invention. While the embodiments described above refer to particular features, the scope of this invention also includes embodiments having different combinations of features and embodiments that do not include all the described features. Accordingly, the scope of the present invention is intended to embrace all such alternatives, modifications, and variations as fall within the scope of the claims, together with all equivalents thereof.

[0036] What has been described above includes examples of the claimed subject matter. It is, of course, not possible to describe every conceivable combination of components or methodologies for purposes of describing the claimed subject matter, but one of ordinary skill in the art may recognize that many further combinations and permutations of the claimed subject matter are possible. Accordingly, the claimed subject matter is intended to embrace all such alterations, modifications, and variations that fall within the spirit and scope of the appended claims. Furthermore, to the extent that the term "includes" is used in either the detailed description or the claims, such term is intended to be inclusive in a manner similar to the term "comprising" as "comprising" is interpreted when employed as a transitional word in a claim.

What is claimed is:

- 1. A dual-lace football device comprising:
- a body formed from a first half and a second half, wherein the first half is attached to the second half via a stitch;
- a first lace positioned on the first half and second lace positioned on the second half, the first lace and the second lace being located opposite one another on the body; and
- a first pattern on the first lace and a second pattern on the second lace, the first pattern and the second pattern comprising a raised element or a recessed element to enhance grip.
- 2. The dual-lace football device of claim 1, wherein the body is comprised of a leather, a synthetic leather, a composite material, or a polyurethane.

- 3. The dual-lace football device of claim 1, wherein the stitch is comprised of a double stitch, a zigzag stitch, or a lock stitch.
- **4**. The dual-lace football device of claim **1**, wherein the first lace and the second lace are comprised of a rubber or a synthetic fiber.
- 5. The dual-lace football device of claim 4, wherein the synthetic fiber is comprised of a moisture-wicking material.
- **6**. The dual-lace football device of claim **5**, wherein the moisture-wicking material is comprised of a hydrophobic silicone or a polymer-based yarn.
- 7. The dual-lace football device of claim 1, wherein the first pattern and the second pattern are comprised of an alternating ridge and groove.
  - 8. A dual-lace football device comprising:
  - a body formed from a first half and a second half, wherein the first half is attached to the second half via a reinforced stitch;
  - a first lace positioned on the first half and second lace positioned on the second half, the first lace and the second lace being located opposite one another on the body; and
  - a first pattern on the first lace and a second pattern on the second lace.
- 9. The dual-lace football device of claim 8, wherein the reinforced stitched is reinforced via a sealant.
- 10. The dual-lace football device of claim 8, wherein the reinforced stitched is reinforced via a coating.
- 11. The dual-lace football device of claim 8, wherein the first pattern is comprised of a micro-groove.

- 12. The dual-lace football device of claim 8, wherein the second pattern is comprised of a micro-groove.
  - 13. A dual-lace football device comprising:
  - a body formed from a first half and a second half, wherein the first half is attached to the second half via a reinforced stitch;
  - a first lace positioned on the first half and second lace positioned on the second half 180 degrees from the first place, the first lace and the second lace being located opposite one another on the body; and
  - a first pattern on the first lace and a second pattern on the second lace.
- **14**. The dual-lace football device of claim **13**, wherein the body is comprised of a leather, a synthetic leather, a composite material, or a polyurethane.
- 15. The dual-lace football device of claim 13, wherein the stitch is comprised of a double stitch, a zigzag stitch, or a lock stitch.
- 16. The dual-lace football device of claim 13, wherein the first lace and the second lace are comprised of a rubber or a synthetic fiber.
- 17. The dual-lace football device of claim 16, wherein the synthetic fiber is comprised of a moisture-wicking material.
- 18. The dual-lace football device of claim 17, wherein the moisture-wicking material is comprised of a hydrophobic silicone or a polymer-based yarn.
- 19. The dual-lace football device of claim 9, wherein the reinforced stitched is reinforced via a sealant.
- 20. The dual-lace football device of claim 9, wherein the reinforced stitched is reinforced via a coating.

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