1. Reverse deadlift apparatus

Date: 2018-06-26 | ID: 10004934

Abstract: The embodiments herein relate to an exercise machine for training the muscles of the whole body while specifically targeting the muscles of the legs and back. Specifically, the embodiments herein relate to a Reverse Deadlift Apparatus which allows a trainee to mimic a barbell type deadlift exercise in a safer and more productive fashion. An additional benefit is that the Reverse Deadlift Apparatus encourages a lifter to use proper technique by requiring them to use more of their legs and less of their lower back during the lift. The result of using the Reverse Deadlift Apparatus on a regular basis is that a lifter will increase the strength and power of the muscles of the whole body and specifically will make improvements in the lower body. The added strength and power, along with optimized Deadlifting form, will help a lifter improve their performance in the actual barbell deadlift itself and in any sports requiring a strength or power component (e.g. Football, Baseball, Martial Arts, Wrestling, Powerlifting, Olympic Lifting, Tennis, etc.).

2. Information-presentation structure with impact-sensitive color changing incorporated into football or baseball/softball field

Date: 2018-07-03 | ID: 10010751

Abstract: A variable-color region (106) of a football-playing or baseball/softball-playing structure of an information-presentation structure extends to an exposed surface (102) at a surface zone (112) and normally appears along it as a principal color. An impact-dependent portion (138) of the variable-color region responds to an object (104) impacting the zone at an object-contact area (116) by temporarily appearing along a closely matching print area (118) of the zone as changed color materially different from the principal color. For football, the zone typically adjoins an end or side line (1446 or 1448) to help determine whether the object, typically a person's shoe, impacted the surface in or out. For baseball/softball, the zone typically adjoins a foul line (1506) to help determine whether the object, a baseball/softball, impacted the surface fair or foul.

3. Protective headgear and shoulder pad apparatus and methods

Date: 2018-07-10 | ID: 10016006

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof

to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

4. Open palm hand covers and uses of said covers

Date: 2018-07-10 | ID: 10016671

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partial hand covers and the use of said covers, intended to increase the overall performance in sports activities. More specifically, the present invention offers strategic openings in select areas of the palm, creating substantial and significant advantages for the user, in playing the sports of football, golf and basketball.

5. Adjustable shoulder pads

Date: 2018-08-21 | ID: 10052547

Abstract: Shoulder pads for a player playing a contact sport, such as hockey, lacrosse or football, are provided. The shoulder pads comprise a front member, a back member, left and right shoulder arches, left and right shoulder protectors, and an adjustment system allowing the player to adjust a fit of the shoulder pads. The adjustment system may allow the player to adjust various components of the shoulder pads, including the front member, the back member, and the left and right shoulder protectors, in various directions.

6. Non-collision football and data tracking system

Date: 2018-08-28 | ID: 10058761

Abstract: The invention provides a system for playing a non-collision sport. The system comprises one or more hand devices, a jersey, shoulder pads optionally, and data collection and transfer devices. A server is part of the system and has at least one algorithm that manipulates and interprets the collected data. A data management system is connected in real-time to monitor play of the game and record and analyze player progress during game play.

7. Method for manufacturing an upper for a shoe

Date: 2018-08-28 | ID: 10059071

Abstract: Methods for manufacturing an upper for a shoe, in particular a football shoe, are described. A base layer for an upper is provided. At least one profile element, which comprises a rubber material, is connected to the outer face of the base layer. The profile element is connected to the outer face of the base layer without using a seam by means of hot pressing.

8. Sport gloves

Date: 2018-09-04 | ID: 10065101

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves intended to increase the overall performance in sports activities including but limited to football and golf. Primarily because of its unique finger configurations, and/or grip enhancers, and/or hand protective properties, the present invention makes a glove more operable in various sports activities.

9. Sports video display

Date: 2018-10-02 | ID: 10089550

Abstract: A system and method of producing and superimposing information graphics that relate to a sporting event. The information graphics may be superimposed on the playing surface during an athletic competition, a racetrack during a motorsports race, and the like. The information graphics may comprise a superimposed first down line that corresponds to a football team's colors. The information graphics may comprise a superimposed perimeter that borders the playing surface and corresponds to a team's colors. Additional embodiments include an information display graphic that quickly provide critical information to viewers.

10. Energy absorbing football helmet

Date: 2018-10-16 | ID: 10098402

Abstract: A football helmet including a one-piece outer shell defining an exterior and an interior. The shell includes a plurality of slots penetrating at least partially through the shell from the exterior to the interior of the shell. Each slot may be disposed adjacent to at least one other slot and each pair of adjacent slots defines an energy absorbing beam portion between the adjacent slots. Each beam portion is configured to deform and absorb energy when the exterior of the shell is impacted from a normal direction.

11. Football helmet with faceguard having raised eyebrow areas

Date: 2018-10-16 | ID: 10098406

Abstract: A football helmet comprising a rigid plastic shell adapted to cover the head of a wearer and a faceguard in the form of a cage of metal bars and removably attached to the shell. The faceguard includes an upper portion including an uppermost bar having a center bar part and a pair of side bar parts, and a horizontal bar below the center bar part and connected to the center bar part by a vertical bar, the uppermost bar and horizontal bar defining a gap between them which extends the entire length of the horizontal bar. The faceguard has a pair of raised eyebrow areas, each raised eyebrow area consisting of one of the pair of side bar parts bent upwardly with respect to the center bar part, in the uppermost bar being positioned on either

side of the front portion of the shell and above the lower edge of the front portion of the shell.

12. Systems and methods for monitoring a physiological parameter of persons engaged in physical activity

Date: 2018-10-23 | ID: 10105076

Abstract: The present disclosure provides system and method for monitoring of at least one physiological parameter of a person engaged in a physical activity, for example, an impact received by a player engaged in a contact sport such as football. The system includes a monitoring unit that actively monitors the physiological parameter of the person, wherein the monitoring unit generates an alert event when the monitored physiological parameter exceeds a threshold of the parameter. The monitoring unit determines whether the parameter exceeds an over-exposure threshold, wherein said threshold is based upon both a single incidence or cumulative incidences.

13. Computer-implemented methods and systems enabling fan participation in calling plays at sporting and other events

Date: 2018-10-30 | ID: 10112100

Abstract: Systems and methods are disclosed for determining a score for a user of a gaming platform such that the score reflects the user's success rate in calling plays in a sporting event. A computing device receives a user profile including a coach score and initiates a sequence of states, which include a poll creation state, a first notification state, a coach pick state, a fan voting state, a second notification state, and a play in action state. The computing device calculates a field score associated with the real-time play based on an on-field result. The computing device updates a coach score and outputs content to the registered user computing device related to the coach score. The computerized method and system is not limited to football, and may also be applied to other live events such as soccer, baseball, golf, hockey, or basketball.

14. Football tackling training sled

Date: 2018-11-13 | ID: 10124228

Abstract: The football tackling training sled is a device that is used to train football players how to tackle during a football practice. The football tackling training sled is further defined with a backbone support that is attached to a base member via a spring-loaded counter hinge. The backbone support is encapsulated with a padding so as to be impacted via a user. The backbone support rests at an obtuse angle with respect to the base member. The backbone support includes a track, which interfaces with a floating t-bar. The user impacts the backbone support with a lateral force while the user drives the floating t-bar upwardly and along

the track.

15. Sports helmet

Date: 2018-11-27 | ID: 10136692

Abstract: The present invention provides a protective sports helmet for a wearer engaged in a contact sport, such as football. The helmet includes a shell having a front region, a rear region, two side regions, and an ear flap depending from a side region. A jaw flap extends forwardly from each ear flap, wherein the jaw flap overlies an extent of a mandible of the wearer. The shell also includes a raised central band that extends from the front region across the crown to the rear region. The central band has lower side portions that extend from the rear region towards the side region of the shell and terminate proximate an ear opening in the shell. The central band has a width defined by a pair of opposed sidewalls that extend transversely from an outer surface of the shell. The shell also includes a first plurality of vent openings aligned along a first side of the raised central band and a second plurality of vent openings aligned along a second side of the band.

16. Protective sports helmet

Date: 2018-12-04 | ID: 10143257

Abstract: A football helmet includes a plastic shell with side regions having an ear flap with a face guard connector, an ear opening, a slot, and a snap connector. The helmet also includes an internal padding assembly removably connected to the plastic shell and including a jaw pad with a force attenuating layer. When the helmet is worn, a front edge of the jaw pad is positioned both in front of a coronal plane and below a basic plane of a head of the helmet wearer. A chin strap assembly releasably secures the helmet to the wearer and includes a lower flexible strap extending outwardly from each side of a central protective member. When the helmet is worn, an extent of the lower flexible strap is received by the slot when said strap is affixed to the snap connector. The shell also includes a raised central band integrally formed as part of the shell and extending across the crown region to the rear region. An arrangement of elongated vent openings flank the raised central band.

17. Exercise ring for improving strength and flexibility of a body part

Date: 2018-12-04 | ID: 10143883

Abstract: An apparatus and method may exercise muscles of a body part, especially the neck, waist, torso, legs, and glutes from any angle with variable resistance while taking up minimal floor space. The apparatus may improve the ability of athletes, including football players and wrestlers, to better prepare for contact from any angle while engaged in their sport. The apparatus may include a ring having a guide track therein. Another inner ring may also be provided in different sizes and shapes to accommodate a variety of users. A

car may be connected to a source of resistance ride freely along the guide track. The source of resistance may be other gym equipment including a bungee cord, a cable cross over machine, springs, and the like. As the user freely exercises by moving the body part, the car may adapt to the user's position to facilitate a full range of motion.

18. Sport gloves

Date: 2018-12-04 | ID: 10143909

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves intended to increase the overall performance in sports activities including but limited to football and golf. Primarily because of its unique finger configurations, and/or grip enhancers, and/or hand protective properties, the present invention makes a glove more operable in various sports activities.

19. Recreational device with rotor assembly

Date: 2018-12-11 | ID: 10150014

Abstract: Recreational footballs with rotor assemblies are provided herein. An example football includes a plurality of struts forming a prolate spheroid frame; and one or more rotor assemblies each having a plurality of blades, the one or more rotor assemblies being disposed within the prolate spheroid frame, the one or more rotor assemblies changing at least one aerodynamic aspect of flight of the recreational device when air passes through the prolate spheroid frame and rotates the plurality of blades of the one or more rotor assemblies.

20. System and method for recording and training athletes from multiple points of view

Date: 2018-12-18 | ID: 10158826

Abstract: A system and method for recording and training athletes uses multiple points of view For example, a new football training video in which a stationary camera (75 high) replaces the player (QB). The smooth (not jerky GoPro) easy to see video provides an unobstructed POV from the sightline of the QB (CorneaCAMCC) during the execution of live play. For confirmation of visual fields and analyzing the intentions of the defensive team, there are two other cameras videoing the same play. The user will have the capability to view the play from either of the two other angles in real time, to better understand, interpret and confirm what he thinks he sees at the CorneaCAM POV. All three POV's have freeze frame and slow motion capability.

21. Rotatable goal posts

Date: 2018-12-25 | ID: 10159881

Abstract: Rotatable and hinged goal posts are operably rotatable so that the goal post may rotated to a first position with the uprights being disposed toward a playing field such as for use when playing football, and to second position where the uprights being disposed away from the playing field such as for use when playing soccer. In addition, the rotatable and hinged goal posts are operably pivotable from a raised orientation and a lowered orientation, and vice versa.

22. Tubular projectile device

Date: 2019-01-22 | ID: 10183199

Abstract: Tubular projectile devices are disclosed herein. An exemplary tubular projectile device includes a spheroid frame having a long axis and a short axis. Further, the exemplary tubular projectile device includes a tubular medial section coupled with the spheroid frame; a first bicone comprising an exterior first cone congruent with an interior first cone, the first bicone being terminal along the long axis of the spheroid frame and coupled with the spheroid frame; and a second bicone comprising an exterior second cone congruent with an interior second cone, the second bicone being terminal along the long axis of the spheroid frame and coupled with the spheroid frame. The exemplary tubular projectile device may be a football.

23. Pallet threading apparatus

Date: 2019-01-22 | ID: 10183768

Abstract: A pallet threading apparatus including a directional handle; a flexible rod having a first end and a second end; a football shaped head member having a top portion and bottom portion, the top portion including a longitudinal slot; the directional handle is attached to the first end and the football shaped head member is attached to the second end; a cleat element positioned in the longitudinal slot, the cleat element including a pair of side walls having a plurality of oppositely opposed teeth for retaining a section of strapping material.

24. Method and system for determining ball positions and first downs in a football game

Date: 2019-01-29 | ID: 10188933

Abstract: A method and system for use in the game of football to determine ball placement and position, as well as first down demarcations, is described, with various embodiments configured to track the location of a football to determine its position on the field and to determine and display the first down demarcation on the field. Certain embodiments employ software to assist in performing placement determinations, distance determinations, track movement of the ball, first down markers, as well as light emitting modules along a track that extends parallel to the field.

25. Football helmet having improved impact absorption

Date: 2019-02-12 | ID: 10201743

Abstract: A football helmet is disclosed that includes a shell constructed of fiber reinforced epoxy resin, a liner made from expanded polypropylene, an impact absorbing layer situated between the liner and the shell, and a face guard. The impact absorbing layer is constructed from either expanded polypropylene or a viscoelastic polymer encased in a suitable thin yet resilient and elastic membrane. An optional impact absorbing band is also shown disposed around the inner periphery of the liner and encircling the player's head. The impact absorbing band serves to reduce impact forces occurring from side helmet impact with objects or players.

26. Automobile rooftop mount

Date: 2019-02-12 | ID: 10202082

Abstract: The present disclosure teaches a device and method of vertically mounting a selected item on the roof of a automobile. The item may be put in a horizontal position when entering a garage or tunnel. The item may be a Christmas tree, a menorah, an oversized football helmet, ball, or anything else that can be positioned on a pole.

27. Detection of traumatic brain injury

Date: 2019-02-12 | ID: 10202649

Abstract: The present invention provides minimally invasive methods of detecting, diagnosing, and assessing neuronal damage associated with traumatic brain injury (TBI) or chronic traumatic encephalopathy (CTE). Specific species of microRNAs (miRNA), small, noncoding RNA molecules that play gene regulatory functions, are correlated with cellular damage and oxidative stress following TBI or CTE, allowing for rapid, minimally-invasive diagnosis and assessment of brain injury. The early identification and longitudinal assessment of neuronal damage in subjects suffering from or at risk of suffering from a TBI (e.g., football players, boxers, military personnel, fall victims) will improve clinical outcomes by guiding critical medical and behavioral decision making.

28. Casino wagering game with player selected conditions

Date: 2019-02-12 | ID: 10204470

Abstract: A method, apparatus, and computer readable storage medium to implement a wagering method using at least one electronic random number generator which simulates dice. The method can simulate a game of football which is based purely on player decisions and random outcomes of the random number generator. Different sequences of the method can be initiated based on outcomes of the random number generator.

29. American-style football including electronics

Date: 2019-03-05 | ID: 10220264

Abstract: An American style football including an inflatable prolate spheroidal shaped bladder, a cover assembly, a lacing and an electronic circuit. The bladder includes a valve assembly and a pocket that are symmetrically spaced about a longitudinal plane. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder. One of the first and fourth cover panels extending over the valve assembly and the other of the first and fourth cover panels extending over the pocket. The lacing extends along the longitudinal plane and coupled to the first and fourth cover panels. The electronic circuit is retained by the pocket. The electronic circuit includes at least one sensor and the electronic circuit being configured to produce a signal to enable at least one characteristic of the football to be monitored during use.

30. Protective shoulder pads with release mechanism

Date: 2019-03-05 | ID: 10220291

Abstract: Protective shoulder pads to be worn by an individual engaged in a contact sport, such as football, lacrosse or hockey, are provided. The shoulder pads protect an individual wearing the protective shoulder pads against impact to the superior, anterior, posterior and/or lateral regions of the shoulder and upper arm regions. The shoulder pads include a release mechanism that releasably couples left and right arch members of the shoulder pads and allows for removal of the shoulder pads from the individual while he or she is maintained in the supine position, thus decreasing the risk of further injuring the individual wearing the protective shoulder pads.

31. Refrigerator cover

Date: 2019-03-12 | ID: 10228181

Abstract: Some implementations can include a refrigerator cover having a body portion with a first side, a second side and a top. The first side, second side and top each having generally flat interior surfaces defining an interior space of the cover and each having generally rounded exterior surfaces formed so as to generally resemble a football helmet. The cover can also include a front door attached to the body portion via one or more rotational members, the front door having a generally flat rear surface adjacent a front opening of the body portion when the front door is in a first position, the front door having a protruding member extending from a front surface, where the protruding member is formed generally in a shape of a football helmet face guard.

32. Lens protection systems

Date: 2019-03-12 | ID: 10228494

Abstract: The present disclosure features lens protection systems that comprise multi-layer film laminates that include an optically clear protective film, which remains on the lens during use and carrier layers that are used to assist the user with applying the protective film to the lens. These systems are suitable for use with a wide variety of eyewear, including but not limited to ski goggles, tactical goggles, diving goggles, protective eyewear such as safety glasses, sun glasses, helmet visors (e.g., for football, hockey, or motorcycle helmets), and paintball masks.

33. American-style football including electronics

Date: 2019-03-26 | ID: 10238922

Abstract: An American style football including an inflatable prolate spheroidal shaped bladder, a lining positioned over the bladder, a cover assembly, a lacing, and an electronic circuit positioned between the lining and the cover assembly and generally aligned with the lacing. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder and the lining. The lacing is coupled to the first and fourth cover panels. The electronic circuit includes at least one sensor and the electronic circuit is configured to produce a signal to enable at least one characteristic of the football to be monitored during use.

34. Impact absorption padding for contact sports helmets

Date: 2019-03-26 | ID: 10238950

Abstract: There is disclosed an improved impact absorption padding for a contact sports helmet, for contact sports such as football, hockey and lacrosse, which incorporates a plurality of air pockets formed from a resiliently flexible material, such as plastic or rubber. At least some of the air pockets enclose a coil or spring. The coil or spring is also resiliently flexible over a wide range of temperatures, and oriented to compress in the general direction of impact to absorb a substantial portion of the energy before it is transferred to the head of the player. The coil or spring is also sized and shaped to return the air pocket to a desired thickness and shape after an impact. The air pockets may be arranged to substantially cover the outside of a contact sports helmet shell as a layer of impact absorption padding. A second inner layer of impact absorption padding may also be provided inside the contact sports helmet shell.

35. Delivery system for targeted launching of sports projectile

Date: 2019-04-09 | ID: 10252139

Abstract: A sports projectile delivery system may control the operation of a launcher to cause an American football or other sports projectile to be delivered to a target location on a field. In some aspects, the system

can track player movements on the field, e.g., through the use of a tracking device mounted on the player, enabling the ball etc. to be launched to a player in anticipation of where the player will go. The system may include additional customization and/or logging options, e.g., permitting a player to designate a body position (e.g., above the head or near the knees) for delivery of the ball, designate a speed or hang time for delivery, or provide player data and analytics to an online or otherwise connected database.

36. Protective headgear and shoulder pad apparatus and methods

Date: 2019-04-16 | ID: 10258097

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

37. Football helmet with cheek supports

Date: 2019-04-16 | ID: 10258098

Abstract: A football helmet has a shell made of polycarbonate or ABS plastic or thermoplastic composite material and two cheek supports, each removably connected to an earflap. Each cheek support comprises an outer brace, an inner plate removably connected to the outer brace by fasteners passing through through-going holes formed in the earflap, and a cheek pad attached to the inner plate. The outer brace has a lower edge having a contour shaped to follow a contour of the lower edge of the earflap without extending substantially beyond the lower edge of the earflap. The inner plate has a lower edge having a contour shaped to follow the contour of the lower edge of the earflap without extending substantially beyond the lower edge of the earflap and an extension extending from a body of the inner plate and beyond the front edge of the earflap. A cheek pad is removably attached to the inner plate and positioned to overlay the cheek of a wearer. The cheek supports improve retention of the helmet and provide protection to the cheek area against blows.

38. Football helmet with raised plateau

Date: 2019-04-16 | ID: 10258100

Abstract: A football helmet has a rigid plastic football helmet shell with a single raised plateau in the crown portion of the shell extending from the front portion, over the crown portion, toward the back portion. The

raised plateau has a left border and a right border. The left border is composed of a plurality of segments and extends continuously from the front portion, over the crown portion, toward the back portion. The segments of the left border including at least a first segment and second segment, which meet to form an angle. A non-circular first ventilation hole through the shell has at least a first side, a second side, and a third side, and is positioned at the angle, such that the first side is adjacent to the first segment and the second side is adjacent to the second segment. The first segment extends beyond the first ventilation hole by a first distance at least as long as the first side and the second segment extending beyond the first ventilation hole by a second distance at least as long as the second side.

39. Tackle indicating assembly

Date: 2019-04-16 | ID: 10258855

Abstract: A tackle indicating assembly for flag football players includes a belt that is configured to position around and couple to a waist of a user. Each of a plurality of straps has a terminus that is configured to selectively magnetically couple to the belt. The straps are configured to be grasped in a hand of a tackler so that each strap is positioned to separate from the belt to indicate a tackle of the user.

40. Football snapper

Date: 2019-04-23 | ID: 10265598

Abstract: A portable automatic football snapper may be built as a tube to launch football snaps while being lightweight and able to be carried by handle, shoulder-strap, or clipped onto another backpack. The snapper is small and can store a football within, and, when stood upright, may serve as a stand for a football placed on top to simulate an under center exchange. A stand built into a side of the bag extends to establish a base and ideal snap angle for shotgun snap use. Inside the snapper, a cup may be used to hold the football, may be pulled down and clipped into a pre-snap position, and upon release is pulled upwards, launching or snapping the ball in a spiral to the quarterback. The release may be manual, automatic based on a mechanical or electronic timer, or sound-activated or remote controlled allowing snap control by the quarterback.

41. Protective sports helmet

Date: 2019-04-30 | ID: 10271605

Abstract: A protective sports helmet that includes an energy attenuating faceguard connection system, which includes at least one connector that secures the faceguard to the helmet shell without a connection point in the shell's brow region. The sports helmet can be configured as a football helmet to be worn by a player and where the lack of a brow region connection point results in a gap or clearance between the faceguard and the

shell that has a functional interplay with the connector upon an impact to the faceguard. The football helmet has a unique collection of helmet shell features that include an arrangement of a raised central band, lateral ridges, frontal vent openings and rear vent openings.

42. Heat providing football glove

Date: 2019-05-14 | ID: 10285462

Abstract: A heatable football glove that provides heat to a wearer's hand. The glove includes a body member that includes a pocket therein to accommodate a heating element of substantially the same size as the pocket such that the heating element after activation is introduced through an opening into the pocket where it is snugly received therein and conforms to the pocket in order to be retained therein substantially without movement during use of the glove. A covering member that is selectively movable between open and closed positions is provided for closing the opening and retaining the heating element in the pocket during use of the glove. An attachment member is associated with the covering member for releasably attaching or adhering the covering member to the glove to retain the heating element in the pocket during use.

43. Football helmet with shell section defined by a non-linear channel

Date: 2019-05-14 | ID: 10285466

Abstract: A football helmet comprising a one-piece shell and an energy absorbing layer includes a crown portion, a front portion, a left side portion, a right side portion, and a rear portion. The shell has a non-linear channel spaced in its entirety from an edge of the shell that partially surrounds and defines a shell section within the front portion such that the shell section is moveable relative to the remainder of the shell upon the shell section receiving an impact energy to dampen the impact energy.

44. Modular helmet apparatus and system

Date: 2019-06-04 | ID: 10306944

Abstract: Embodiments of the present disclosure provide for a modular helmet apparatus and system comprised of a removable outer shell disposed on an inner frame. The disclosed football helmet provides for enhanced energy diffusion through the use of one or more energy diffusion areas disposed on an outer shell of the helmet, the one or more energy diffusion areas being configured to align with the energy diffusion zones of the frame. Embodiments of the present disclosure enables a user to quickly and easily replace or swap the outer shell of the helmet with a second or replacement shell by selectively coupling the desired outer shell with the frame.

45. Football training device and method

Date: 2019-06-04 | ID: 10307655

Abstract: A football training device for replicating a defensive rush includes a base frame, a plurality of obstacles extending upward from the base frame, and one or more wheels supporting the base frame. A method of training an offensive football player using the device includes positioning an offensive football player being trained on front of the training device, initiating a drill where the offensive football player carries out a conventional football play, and while the offensive football player carries out the conventional football play, moving the training device, relative to the offensive football player, such that the obstacles simulate a defensive rush toward the offensive player, thereby creating a visual and physical barrier to the completion of the conventional football play.

46. Football receiving and throwing machine

Date: 2019-06-18 | ID: 10322329

Abstract: A machine and method for receiving and launching an oval football. The machine includes a football catch area, a motorized belt to orient the football and motorized wheels to launch the football. The user catching the football throws it back to the machine. The machine automatically orients the football and launches it back to the user catching the football. The machine provides the user a consistent timing pause between receiving the football and launching of the football.

47. Tournament based on poker-like games based on live sporting events

Date: 2019-07-09 | ID: 10347085

Abstract: A tournament played over a network consisting of rounds (hands) of a poker-like game based on the action in one or more live sporting events. The number of hands played, and the timing of those hands, are the same for every player in the tournament, and are independent of the number of players in the tournament. The number of players in the tournament can be arbitrarily large or small. The prize structure can also be independent of the number of players, and announced in advance. The tournament is preferably based on a collection of closely associated betting events, like the drives in a single football game; or a collection of closely associated sporting events. The poker-like games played in each round of the tournament utilize chips where the winners of the tournament are the players with the largest chip counts at the end of the tournament.

48. Football helmet

Date: 2019-07-16 | ID: 10349696

Abstract: A helmet having an inner shell with a first projection and a second projection, an outer shell, and at least one shock absorption system. Each shock absorption system comprises a first recess disposed in the

first projection, a second recess disposed in the second projection, and a leaf spring having a first leg, a second leg, and a curved middle portion. The first leg is received by the first recess and the second leg is received by the second recess. The leaf spring is adapted to flex and extend into the first and second recesses in response to an external impact to the helmet. The inner shell and outer shell may be composed of a synthetic fiber. The shock absorption system may also include a compression spring disposed between a flange of the leaf spring and the second projection of the inner shell.

49. Articles of sports apparel with support elements

Date: 2019-07-23 | ID: 10357067

Abstract: Articles of sports apparel may include elongate support elements. Particular examples provided are swimsuits and other sports apparel such as sports apparel for rugby football. An Article of sports apparel may include at least one base portion adapted to be arranged proximate a lower back of a user when worn, and at least three elongate support elements. The at least three elongate support elements may be arranged at the base portion such as to extend outwardly from a region at least partially encompassing the lower back of the user when worn.

50. Impact attenuation system for a protective helmet

Date: 2019-07-23 | ID: 10357075

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member changes how a portion of the shell having the impact attenuation member responds to an impact force having a component applied substantially normal to the impact attenuation member as compared to how the left and right side portions respond to the impact force.

51. Padding assembly

Date: 2019-08-06 | ID: 10369452

Abstract: A padding assembly for a helmet includes a plurality of pads that is configured to couple to an external surface of the helmet, such as a football helmet. The pads are configured to absorb a force from an impact to the helmet when the helmet is positioned on a head of a user. The force of the impact to the head of the user is reduced.

52. Surface underlayment system with interlocking resilient assemblies of shock tiles

Date: 2019-08-06 | ID: 10369739

Abstract: A surface underlayment system and its method of manufacture that is sandwiched between an impact-receiving upper surface and a lower foundation. The energy absorbing system has subassemblies of interconnected modules that cooperate to absorb and distribute impact forces applied thereto. Each module has one or more frustoconical support structures. At least some of the frustoconical support structures have bases that underlie the upper impact-receiving surface such as a golf putting green, a football field, marine decking, and senior living flooring.

53. Football helmet with raised plateau

Date: 2019-08-13 | ID: 10376011

Abstract: A football helmet has a rigid plastic football helmet shell with a raised plateau of the shell extending from the front portion, over the crown portion, toward the back portion. This raised plateau is the only raised plateau of the shell which begins in the front portion, extends over the crown portion, and ends in the back portion. The raised plateau has a left border and a right border. The left border is composed of a plurality of segments and extends continuously from the front portion, over the crown portion, toward the back portion. The segments of the left border including at least a first segment and second segment, which meet to form an angle. A non-circular first ventilation hole through the shell has at least a first side, a second side, and a third side, and is positioned at the angle, such that the first side is adjacent to the first segment and the second side is adjacent to the second segment. The first segment extends beyond the first ventilation hole by a first distance at least as long as the first side and the second segment extending beyond the first ventilation hole by a second distance at least as long as the second side.

54. System for digital yearbook

Date: 2019-08-13 | ID: 10380102

Abstract: A system and method for providing meeting services in a digital yearbook includes a server and a user device for presenting media content. User interfaces are provided to each user for specifying tendencies, skills and likes of each of the yearbook users and for specifying desired tendencies, desired skills and desired likes of another of the yearbook users who a yearbook user would like to meet. The desired tendencies, skills, and likes contrasts the tendencies, skills and likes of the yearbook users so as to find a friend with differences, thereby balancing and contrasting those of the yearbook user. For example, tendencies are introverted/extroverted, skills are math/science, and likes are music/football, etc.

55. Method, system, and computer program product for sports game

Date: 2019-08-27 | ID: 10395483

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow

players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

56. Football sensing

Date: 2019-09-03 | ID: 10398945

Abstract: A football sensing system may include an American-style football extending along a longitudinal axis and having a maximum transverse dimension defining a transverse axis and at least one accelerometer. The football has a bladder and a cover about the bladder. The accelerometer is carried by the football between the bladder and the cover to sense acceleration along at least a first axis. The accelerometer is sized to sense a predetermined maximum value of acceleration in the first axis. The accelerometer is positioned within the football in a first position with the first axis of the accelerometer angled with respect to the longitudinal axis of the football. The accelerometer in the first position is capable of measuring acceleration values in a direction in line with or parallel to the longitudinal axis of the football that are greater than the predetermined maximum value of acceleration in the first axis.

57. Method, system, and computer program product for interactive sports game

Date: 2019-09-03 | ID: 10403094

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

58. System and methods providing sports event related media to internet-enabled devices synchronized with a live broadcast of the sports event

Date: 2019-09-24 | ID: 10425613

Abstract: An electronic device can be synchronized with a broadcast of a live sporting event to obtain supplemental sports data over a data network from a server storing data associated with the live sporting

event. Supplemental sports data is obtained from the server for display on the electronic device following a triggering activity associated with the broadcast of the live sporting event. Supplemental sports data can be transmitted for rendering on a display associated with the electronic device. Supplemental sports data can include display of an instant replay video of a sports athlete combined with audio of a pre-recorded statement by the sports athlete associated with the instant replay video, an announcement of a score change for a sporting event monitored by the electronic device, and a display of a football widget providing updates on football game status (e.g., possession, ball location, current score) monitored by the electronic device.

59. Modular football helmet apparatus and system

Date: 2019-10-01 | ID: 10426212

Abstract: Embodiments of the present disclosure provide for a modular helmet apparatus and system comprised of a removable outer shell disposed on an inner frame. The disclosed football helmet provides for enhanced energy diffusion through the use of one or more energy diffusion areas disposed on an outer shell of the helmet, the one or more energy diffusion areas being configured to align with the energy diffusion zones of the frame. Embodiments of the present disclosure enables a user to quickly and easily replace or swap the outer shell of the helmet with a second or replacement shell by selectively coupling the desired outer shell with the frame.

60. Game system and method utilizing outcomes of live events, including sporting events

Date: 2019-10-08 | ID: 10438449

Abstract: A bingo-like game system and method utilizing bingo-like game cards depicting a grid formed of a plurality of spaces identifying outcomes associated with a live event such as a football game. A game system comprises a series of unique game cards with each game card depicting a grid formed of a plurality of spaces wherein the spaces identify outcomes associated with a live sporting event. Real time outcomes associated with the live sporting event dictate which matching spaces on the unique game cards are marked automatically or manually. Pre-established patterns of marked spaces determine winners of the game. The system further generates game cards having similar odds of winning based on the arrangement of possible outcomes associated with the live event.

61. Football helmet with movable flexible section

Date: 2019-10-22 | ID: 10448691

Abstract: A protective helmet comprises a shell comprising a non-linear slit at least partially surrounding and defining a flexible section movable relative to the shell. The helmet further comprises an energy absorbing layer contacting an inner surface of the shell and an inner surface of the flexible section. Internal padding is

operably coupled to the energy absorbing layer. The shell has a perimeter, and the non-linear slit does not extend to the perimeter of the shell. The flexible section moves relative to the shell upon the helmet receiving an impact energy to dampen the impact energy.

62. American-style football including electronics

Date: 2019-11-05 | ID: 10463921

Abstract: An American-style football having a major longitudinal dimension extending about a longitudinal axis and including an inflatable prolate spheroidal shaped bladder, a lining positioned about the bladder, a cover assembly, a lacing and a thin electronic tag. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder and the lining. The lacing extends along a longitudinal plane extending through the longitudinal axis and is coupled to the first and fourth cover panels. The tag is positioned between the lining and the cover assembly. The tag is covered by at least one of the first and fourth cover panels but not covered by the second and third cover panels. The tag is configured to enable at least one characteristic of the football to be monitored during use. In another example implementation, the tag is positioned between the lining and the bladder.

63. Football tackling practice assembly

Date: 2019-11-05 | ID: 10463938

Abstract: A football tackling practice assembly for learning a safe tackling method includes a pair of tubes, a crossbeam, and a dummy. Each tube comprises a plurality of nested sections so that the tube is selectively extensible. The crossbeam is coupled to a top of each tube and extends between the tubes. Each of a pair of bases is coupled to and extends perpendicularly from a bottom of a respective tube. The bases are configured to support the tubes perpendicularly to a surface. A first fastener is coupled to the crossbeam. A second fastener is coupled a helmet that is coupled to a head of the dummy. The second fastener is complementary to the first fastener and is positioned to reversibly couple to the first fastener to couple the dummy to the crossbeam so that the dummy is configured to be tackled by a user.

64. Sporting field measurement system

Date: 2019-11-05 | ID: 10466051

Abstract: A sporting field measurement system is disclosed wherein a user is prompted to select, on a mobile device, a field for marking from various sporting field types including, but not limited to football, baseball, softball, soccer, lacrosse, track, tennis, basketball, cricket, polo, rugby, Australian football, volleyball, and badminton. The Global National Satellite System (GNSS) or at least the global positioning system (GPS) is used to locate a user's device. An application displays, on a display, of the mobile device, the dimensions of

the specified sporting field as an overlay on a map, generated by the positioning system and it will communicate with the GNSS or GPS of the device to allow the user to track his or her movement along a specified path of a proposed field. This will allow the user to place the appropriate markers and/or paint the field. Deviations from the path may be indicated on the display of the mobile device or by an audio indication generated by the mobile device.

65. Football helmet with movable shell segment

Date: 2019-11-12 | ID: 10470514

Abstract: A protective helmet comprises a shell having an inner surface and an outer surface, and a shell segment movable relative to the shell; an energy absorbing layer having an inner surface, and an outer surface which contacts the inner surface of the shell; and internal padding operably coupled to the inner surface of the energy absorbing layer. The shell has a perimeter and the shell segment is formed by at least one slot channel in the shell which does not extend to the perimeter of the shell. The shell segment moves relative to the shell upon the helmet receiving an impact force. The slot channel is generally U-shaped.

66. Football helmet with pressable front section

Date: 2019-11-12 | ID: 10470515

Abstract: A protective helmet comprises a shell made of plastic and having a raised central region oriented from a front of the shell towards a rear of the shell, a first vent opening adjacent to the raised central region on a left side of the raised central region, a second vent opening adjacent to the raised central region on a right side of the raised central region, a pressable front section created by a non-linear slit through the shell, which does not extend to an edge of the shell, ear holes formed in the shell; and an energy absorbing layer protected by the shell and having an outer surface.

67. Impact attenuation system for a protective helmet

Date: 2019-11-12 | ID: 10470516

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member changes how a portion of the shell having the impact attenuation member responds to an impact force having a component applied substantially normal to the impact attenuation member as compared to how the left and right side portions respond to the impact force.

68. Helmet for impact protection

Date: 2019-11-19 | ID: 10477909

Abstract: A helmet for protecting a head of a wearer, such as a hockey, lacrosse, football or other sports player. The helmet includes an outer shell and an inner padding disposed between the outer shell and the wearer's head when the helmet is worn. The inner padding includes a plurality of shock absorbers and an interconnector interconnecting the shock absorbers, each shock absorber being deformable in response to a rotational impact on the helmet such that an outer part of the shock absorber moves relative to an inner part of the shock absorber in a direction tangential to an angular movement of the outer shell due to the rotational impact.

69. System and method for real-time personnel fatigue level monitoring

Date: 2019-11-19 | ID: 10478095

Abstract: The present invention relates to analyzing fatigue level of users by transmitting pressure data from user's shoes wirelessly for real-time monitoring. Athletes for in body-contact games such as football, are often suddenly forced out of games due to injuries as it is often difficult to ascertain the nature of the injury on the field. The present invention enables a coach to have an ability to monitor performance of the athletes as they play, thus help in determining current level of athlete's injury, and help in preventing career threatening and/or fatal injuries. Further, pressure sensors can be used to determine fatigue detection and can be verified by readings from knock sensor, accelerometer data, etc. Variations in all such sensors for a time slice t-seconds can be used as an indicator for fatigue.

70. Breakaway facemask system

Date: 2019-11-26 | ID: 10485285

Abstract: A breakaway facemask system for reducing injuries from a facemask penalty in American football includes a helmet that is worn during athletic activities. A cage is removably coupled to the helmet. The cage is positioned to cover to the opening thereby protecting a user's face from impact. A plurality of retainers is provided and each of the retainers is coupled to the helmet. Each of the retainers releasably engages the cage such that the cage is removably coupled to the helmet. The cage breaks away from the helmet when the cage is gripped thereby reducing the possibility of injury to the user.

71. Device and method for properly locating the YardLine numbers of a football field

Date: 2019-11-26 | ID: 10486053

Abstract: A template for properly determining the positions for the yardline numbers of an American-style football field includes a generally rectangular frame having an external perimeter and an internal opening defined by an internal perimeter. The shape of the internal opening, and the corresponding shape of the

internal perimeter, is such that for each of the yardline numbers, i.e. 5, 4, 3, 2, 1, and 0, the internal perimeter defines a plurality of locations for abutting a corresponding plurality of outer edge portions of the yardline number. With the external perimeter appropriately aligned along one or more lines of the field, the frame can be used to properly locate any one of the six yardline numbers that are needed to properly locate all of the yardline numbers on an American-style football field. This frame reduces the number of templates needed to locate the yardline numbers of a football field, and also simplifies the process of properly locating the yardline numbers.

72. Football helmet with recessed face guard mounting areas

Date: 2019-12-17 | ID: 10506841

Abstract: A protective football helmet is provided having a face guard mounting system with at least one pair of opposed recessed mounting regions that ensure a low-profile mounting arrangement for a face guard to the helmet. The recessed mounting regions are formed in both the inner and outer surfaces of the helmet shell along a frontal opening in the shell. As a result of the streamlined frontal appearance provided by the face guard mounting system, the width of the face guard closely corresponds to the width of the helmet at the recessed mounting regions.

73. Antler wall mount assembly

Date: 2020-01-07 | ID: 10525764

Abstract: An assembly for mounting deer antlers is provided, the assembly generally comprising an enclosure, the enclosure generally shaped like a game ball such as a football, and comprising a front portion and a rear portion, the enclosure being adapted to couple end portions of main beams of the antlers to an inside surface of the enclosure rear portion such that portions of the antlers extend through lateral holes, to an area outside the enclosure, the enclosure front and rear portions being removably coupled to one another.

74. Telescoping football holder

Date: 2020-01-14 | ID: 10532262

Abstract: A compact device for assisting place kicking a football is disclosed, including a module connecting telescoping legs and football tip telescoping holding arm, with the legs connecting the module for pivoting the legs from a ground engaging position to a transport position beneath and parallel to the arm.

75. Football helmet having three energy absorbing layers

Date: 2020-01-28 | ID: 10542788

Abstract: A football helmet is disclosed that includes a shell constructed of fiber reinforced epoxy resin, a thin

resilient outer liner adjacent the inner shell surface, a thicker resilient middle liner and a thin resilient inner liner. The three liners are preferably fabricated from expanded polypropylene or suitable substitute having comparable resilient energy absorbing properties. The inner and outer liners are made from higher impact absorbing material than the impact absorbing material of the middle liner. The helmet also includes fitment pads, jaw pads, a face mask, and moisture absorbing cloth material.

76. Sports awareness vest

Date: 2020-02-04 | ID: 10549167

Abstract: A system, device, and method are provided herein for remotely trigger a light on an awareness article. In some embodiments, the awareness article is a vest used by football players where a plurality of awareness vests are in electronic communication with an electronic device. A coach can control activation of the light on each awareness vest such that, for example, a quarterback can throw a football to the person wearing the awareness vest with the activated light. Various other aspects of the system, device, and method are described herein, and other applications of the awareness vest can include other sports such as soccer and hockey, dog training such as hunting and schutzhund, and military training such as war games, target practice, and enemy identification.

77. System and method of penalty data compilation, analysis and report generation

Date: 2020-02-04 | ID: 10553124

Abstract: The present invention relates generally to a system and method for reviewing and evaluating performance. In particular, the present invention relates to a system, method, and computer program produce for reviewing and evaluating performances of an official or group of officials at an event or events. Even more specifically, according to embodiments of the present invention, the system and method can involve reviewing and evaluating an official or group of official's performance during a sporting event or events, such as a football game or games or a basketball game or games.

78. Protective headgear and shoulder pad apparatus and methods

Date: 2020-02-11 | ID: 10555575

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military

activities and the like.

79. Oval football receiving and launching machine and method

Date: 2020-02-18 | ID: 10561905

Abstract: What is provided is a football catching and throwing machine and method that includes an inclined upwardly angled path. The machine includes a collector configured to receive a football thrown into it; a ball translator configured to align the football and transport the football up the inclined path to a football accelerator that launches the football into the air; and a motor that operates the football accelerator.

80. Partial fingered gloves for football or golf play

Date: 2020-02-25 | ID: 10569154

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves and the use of said gloves, intended to increase the overall performance in sports activities including but limited to football and golf. Because of its unique finger configurations, grip enhancers, and/or its hand protective properties, the present invention makes a glove now operable on a football quarterback's throwing hand and on golfers dominant hand, for example.

81. Method and system for playing a bowling game in combination with a game of football as a secondary game

Date: 2020-02-25 | ID: 10569157

Abstract: A method and system for playing a bowling game in combination with a football-type game is disclosed. The method and system comprising the steps of initiating a conventional bowling game, filling at least one bowling frame, evaluating a bowling score for at least one bowler, generating a football play result based on the bowling score, displaying a football position based on the football play result, continuing the bowling game and generating the football play result until a 10th frame of bowling is completed, determining a winning football team, and providing an award to the winning football team.

82. Supporting element for shoes

Date: 2020-03-03 | ID: 10575585

Abstract: Described are supporting elements for a shoe, in particular for soccer shoes or American football shoes, as well as a sole and a shoe with a supporting element. The supporting element includes a first bending stiffness for bendings from an initial unbent state up to an upper end of a threshold angle range, and a second bending stiffness for bendings beyond the upper end of the threshold angle range, wherein the

second bending stiffness is greater than the first bending stiffness.

83. System and methods of objectively evaluating football player tackling performance

Date: 2020-03-03 | ID: 10576349

Abstract: A system is provided for evaluating football player tackling performance of learned skills in a competitive in-game setting. The system includes reviewing video footage of football games, and analyzing each tackle opportunity with clear objectives for the player with the tackling opportunity to satisfy to achieve a successful result. The system also includes a visual tool that provides clear context for analysis of each tackle opportunity. Methods of evaluation are also provided.

84. Rich data types

Date: 2020-03-03 | ID: 10579724

Abstract: The present disclosure is directed to systems and methods for implementing rich data types in a spreadsheet application. Generally, a value being of a rich data type is as a type of value that has context and established relationships with other types of data. In particular, a rich data type is a data value having associated context, which may be units (e.g., inches, miles, meters, kilograms, seconds, joules, hertz, Fahrenheit, etc.) or other information about the data's type (e.g., city, stock, NCAA football team, car, restaurant, school, etc.). Additionally, a value being of a rich data type further includes established relationships with other types of data.

85. Football helmet with impact attenuation system

Date: 2020-03-10 | ID: 10582737

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member is purposely engineered to change how the front portion responds to an impact force applied substantially normal to the front portion as compared to how other portions of the shell respond to that impact force. In one version, the impact attenuation member is a cantilevered segment formed in the front portion of the shell.

86. Method and system for motion data processing

Date: 2020-03-10 | ID: 10582884

Abstract: A method for motion data processing includes: sensing a plurality of motion data of football player by a magnetic football and magnetic sensors; according to the motion data, analyzing the player's motion trajectory by a processing chip, and identifying whether the player's kicking motion is sliding tackle, smashing

or dribbling.

87. Method of making textured sports ball

Date: 2020-03-10 | ID: 10583332

Abstract: A sports ball (10), such as a football (12), has outer panels (14) of leather. The outer panels (14) have embossed pebbles (16) to enhance grip. Each outer panel (14) is formed by embossing the pebbles (16) on a segment (54) forming one or more of the outer panels (14) after the segment (54) has been cut from the unembossed full hide or half hide from which it comes. This provides great advantages in flexibility and consistency of manufacturing in addition to improved performance such as grip and aerodynamics.

88. System and method for providing an alert on delivering digital content

Date: 2020-03-10 | ID: 10587933

Abstract: The present invention discloses a system and method for providing an alert on delivering a digital content such as when an interesting digital content is imminent, for example, the beginning of a play during a football game, to direct the focus of one or more viewers towards the digital content. The present invention is further configured to embed a commercial message in conjunction with the alert on directing the focus of the viewers. The system is adapted to activate the alert either manually or automatically. Further, the system is optionally implemented with an artificial intelligence (AI) system, which is trained using deep learning to recognize the appropriate time to automatically trigger the alert/commercial message sequence. The AI system could be trained by monitoring the manual control of alert activation.

89. Lewis helmet

Date: 2020-03-24 | ID: 10595577

Abstract: A protective football helmet is provided having a two-piece mold shell diminution shell system.The helmet is comprised of a nine-piece part outer shell, a solid rim outer shell to deflect direct impact from the nine piece part outer shell, an inner liner helmet, compression springs as shocks, and a spin dial to control and restrict the movement of the compression springs and nine piece part outer shell. The nine piece part is a special designed helmet to absorb impact on contact from the crown of the helmet, all four sides and all angles in between to protect the players' head from direct contact at any angle. The outer shell diminution system is piece parted to absorb the impact energy individually by the outer shell protection. Each outer shell piece parted section takes on the impact of energy with an oval shape to deflect and transfer contact impact energy from one piece part to another, thereby dispersing the energy throughout the outer shell of the helmet.

90. Novelty football audio apparatus

Date: 2020-03-24 | ID: 10596420

Abstract: A novelty football audio apparatus for playing fight songs to show school pride includes a football body having a football-shaped skin forming an inner cavity. The skin has an exterior, an interior, and an access aperture extending through to the inner cavity. An access panel is coupled to the football body to cover and alternatively uncover the access aperture. A set of imitation laces is coupled to the football body and is configured to represent laces from a real football. An electronics housing is coupled to the interior of the skin within the inner cavity beneath the access aperture. A tone generator coupled within the electronics housing. A speaker is coupled within the skin above the electronics housing and is in operational communication with the tone generator. A power button is coupled within the skin above the electronics housing and is in operational communication with the tone generator.

91. Drive shaft

Date: 2020-03-24 | ID: 10598210

Abstract: A drive shaft is formed by welding two spline shaft heads to a hollow middle section of tubing. The spline shaft head includes teeth which are crowned to permit an angular offset of the drive shaft relative to cylindrical splines of connectors, such that the end faces of the teeth define a barrel shape. The teeth of the spline shaft head include a side face curvature, defining a football-shaped tooth cross-section. Torque is rotationally transmitted across a permitted angular offset of the drive shaft relative to cylindrically arranged linear splines of drive and driven connectors (i.e., relative to the engine output axis of rotation and the differential input axis of rotation), thereby avoiding the use of prior art universal joints.

92. Anti-concussion collar assembly and method of use

Date: 2020-03-31 | ID: 10602793

Abstract: An anti-concussion helmet attachment collar assembly includes a cowl body attached to a curved helmet attachment ring segment at its upper end, and to a cowl support ring at its lower end. A circular rolling element bearing is interposed between the bottom of the cowl support ring and the interior shoulder of an underlying central ring, facilitating rotation of the cowl support ring with respect to the central ring. A modified helmet incorporates a flange with keyhole openings coupleable with standoff rivets on the helmet attachment ring segment. A base attached to equipment, such as football shoulder pads, is configured to selectively couple with the central ring during use.

93. Kicking tee for football and rugby

Date: 2020-04-07 | ID: 10610758

Abstract: The invention discloses a kicking tee for American football or rugby that maximizes the possible

forward lean of the football which extends the segment of impact through the ball while also exposing the entire ball from base to tip to the view of the kicker, allowing the kicker to more easily aim at the ball's sweet spot. The results achieved by use of the present invention are greater distance and height, velocity and hangtime, as well as greater control of the trajectory of the ball over that of the prior art. The invention also improves on the prior art by allowing a greater overall range of ball placement, resulting in the kicker having greater control over where the ball will travel on the field of play.

94. System and method for enhancing fan experience when attending a sporting event such as a football game or a music concert at a stadium

Date: 2020-04-21 | ID: 10625656

Abstract: System for enhancing fan experience comprises a stadium having a field area, a pathway extending along at least a portion of the field area, and a vehicle adapted to move along the pathway, the vehicle being adapted to transport sports fans situated within the vehicle simultaneously along the pathway during a sports event or concert go-ers situated within the vehicle simultaneously along the pathway during a music concert, to provide a view to the sports fans riding in the vehicle from amongst and/or in close proximity to the players in a sideline area on the field area during a sports event, and to provide a view to concert go-ers riding in the vehicle from close proximity to a stage located on the field area and the performers on the stage during a music concert.

95. Simulated American football game

Date: 2020-04-28 | ID: 10632364

Abstract: A simulated American football game, with a particular gaming surface, and methods of play are described. The gaming surface may include an elongate I shaped field that may include a simulated field region bounded by two opposing simulated play regions in a same plane. The simulated field region may simulate a 100 yard American football field and may include LED lighting to track a line of scrimmage and to track a first down yard marker target. The two opposing simulated play regions may provide for a diversity and plurality of various play outcomes that may dictate certain gameplay results when a slider comes to rest mostly over a given target or region. The slider may be slid from one opposing simulated play region, across the simulated field region to the other opposing simulated play region. In some embodiments, defensive blocking obstacles may be used to intentionally increase gameplay difficulty.

96. Notifications for rich data types

Date: 2020-05-05 | ID: 10642930

Abstract: The present disclosure is directed to systems and methods for implementing notifications for rich

data types in a spreadsheet application. Generally, a value being of a rich data type is as a type of value that has context and established relationships with other types of data. In particular, a rich data type is a data value having associated context, which may be units (e.g., inches, miles, meters, kilograms, seconds, joules, hertz, Fahrenheit, etc.) or other information about the data's type (e.g., city, stock, NCAA football team, car, restaurant, school, etc.). Additionally, a value being of a rich data type further includes established relationships with other types of data.

97. Free kick distance projecting device

Date: 2020-05-19 | ID: 10653936

Abstract: A display device for displaying a marking in the form of a distance to be kept between game equipment, in particular a football, and a participant on a playing field of a sports facility, includes a display device for projecting light beams representing the marking onto the playing field. The projected light beams display the distance to be kept, and can be projected at least in sections in the shape of a circle, for example at a distance of 9.15 m, around the game equipment on the playing field. The display device is jointly movable with a transport device that is movable above the sports facility.

98. Method, system, and computer program product for interactive sports game

Date: 2020-05-26 | ID: 10665061

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

99. Football sensing

Date: 2020-06-02 | ID: 10668333

Abstract: An automated objective American-football evaluation system may include an American-style football, at least one sensor carried by the football, and electronics. The electronics arranged to: (a) receive strings of sensor signals from the at least one sensor, wherein the characteristic of the throw of the football determined by the electronics; and (b) output throw quality. The throw quality is based upon a combination of at least two throw characteristic determined based upon the received string of sensor signals associated with a throw of the football. The at least two throw characteristics are selected from a group of throw

characteristics consisting of: velocity; spin rate; time-of-flight; angle of attack; release angle; cone angle; nutation angle; spiral efficiency; and spiral decay.

100. Footwear for playing football

Date: 2020-06-09 | ID: 10674784

Abstract: A football shoe or boot including a sole (12), an upper (14) and a tongue (16), wherein the upper includes a flap (22) that overlies the tongue and at its lateral edges (33) is separated from side portions (15) of the upper by respective slits (25) open at their rear ends (26) and closed at their forward ends (27). The flap has an upper surface (23) that includes a ball control region (30). In one aspect the ball control region extends rearwardly from a foremost extremity located rearwardly of the forward ends of said slits. In another aspect, the slits are provided with lacing (60) whereby, when the shoe or boot is being worn, the relative positions of said lateral edges and the opposed side portions of the upper may be controlled.

101. Reverse deadlift apparatus

Date: 2018-06-26 | ID: 10004934

Abstract: The embodiments herein relate to an exercise machine for training the muscles of the whole body while specifically targeting the muscles of the legs and back. Specifically, the embodiments herein relate to a Reverse Deadlift Apparatus which allows a trainee to mimic a barbell type deadlift exercise in a safer and more productive fashion. An additional benefit is that the Reverse Deadlift Apparatus encourages a lifter to use proper technique by requiring them to use more of their legs and less of their lower back during the lift. The result of using the Reverse Deadlift Apparatus on a regular basis is that a lifter will increase the strength and power of the muscles of the whole body and specifically will make improvements in the lower body. The added strength and power, along with optimized Deadlifting form, will help a lifter improve their performance in the actual barbell deadlift itself and in any sports requiring a strength or power component (e.g. Football, Baseball, Martial Arts, Wrestling, Powerlifting, Olympic Lifting, Tennis, etc.).

102. Information-presentation structure with impact-sensitive color changing incorporated into football or baseball/softball field

Date: 2018-07-03 | ID: 10010751

Abstract: A variable-color region (106) of a football-playing or baseball/softball-playing structure of an information-presentation structure extends to an exposed surface (102) at a surface zone (112) and normally appears along it as a principal color. An impact-dependent portion (138) of the variable-color region responds to an object (104) impacting the zone at an object-contact area (116) by temporarily appearing along a closely matching print area (118) of the zone as changed color materially different from the principal color.

For football, the zone typically adjoins an end or side line (1446 or 1448) to help determine whether the object, typically a person's shoe, impacted the surface in or out. For baseball/softball, the zone typically adjoins a foul line (1506) to help determine whether the object, a baseball/softball, impacted the surface fair or foul.

103. Protective headgear and shoulder pad apparatus and methods

Date: 2018-07-10 | ID: 10016006

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

104. Open palm hand covers and uses of said covers

Date: 2018-07-10 | ID: 10016671

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partial hand covers and the use of said covers, intended to increase the overall performance in sports activities. More specifically, the present invention offers strategic openings in select areas of the palm, creating substantial and significant advantages for the user, in playing the sports of football, golf and basketball.

105. Adjustable shoulder pads

Date: 2018-08-21 | ID: 10052547

Abstract: Shoulder pads for a player playing a contact sport, such as hockey, lacrosse or football, are provided. The shoulder pads comprise a front member, a back member, left and right shoulder arches, left and right shoulder protectors, and an adjustment system allowing the player to adjust a fit of the shoulder pads. The adjustment system may allow the player to adjust various components of the shoulder pads, including the front member, the back member, and the left and right shoulder protectors, in various directions.

106. Non-collision football and data tracking system

Date: 2018-08-28 | ID: 10058761

Abstract: The invention provides a system for playing a non-collision sport. The system comprises one or

more hand devices, a jersey, shoulder pads optionally, and data collection and transfer devices. A server is part of the system and has at least one algorithm that manipulates and interprets the collected data. A data management system is connected in real-time to monitor play of the game and record and analyze player progress during game play.

107. Method for manufacturing an upper for a shoe

Date: 2018-08-28 | ID: 10059071

Abstract: Methods for manufacturing an upper for a shoe, in particular a football shoe, are described. A base layer for an upper is provided. At least one profile element, which comprises a rubber material, is connected to the outer face of the base layer. The profile element is connected to the outer face of the base layer without using a seam by means of hot pressing.

108. Sport gloves

Date: 2018-09-04 | ID: 10065101

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves intended to increase the overall performance in sports activities including but limited to football and golf. Primarily because of its unique finger configurations, and/or grip enhancers, and/or hand protective properties, the present invention makes a glove more operable in various sports activities.

109. Sports video display

Date: 2018-10-02 | ID: 10089550

Abstract: A system and method of producing and superimposing information graphics that relate to a sporting event. The information graphics may be superimposed on the playing surface during an athletic competition, a racetrack during a motorsports race, and the like. The information graphics may comprise a superimposed first down line that corresponds to a football team's colors. The information graphics may comprise a superimposed perimeter that borders the playing surface and corresponds to a team's colors. Additional embodiments include an information display graphic that quickly provide critical information to viewers.

110. Energy absorbing football helmet

Date: 2018-10-16 | ID: 10098402

Abstract: A football helmet including a one-piece outer shell defining an exterior and an interior. The shell includes a plurality of slots penetrating at least partially through the shell from the exterior to the interior of the shell. Each slot may be disposed adjacent to at least one other slot and each pair of adjacent slots defines an

energy absorbing beam portion between the adjacent slots. Each beam portion is configured to deform and absorb energy when the exterior of the shell is impacted from a normal direction.

111. Football helmet with faceguard having raised eyebrow areas

Date: 2018-10-16 | ID: 10098406

Abstract: A football helmet comprising a rigid plastic shell adapted to cover the head of a wearer and a faceguard in the form of a cage of metal bars and removably attached to the shell. The faceguard includes an upper portion including an uppermost bar having a center bar part and a pair of side bar parts, and a horizontal bar below the center bar part and connected to the center bar part by a vertical bar, the uppermost bar and horizontal bar defining a gap between them which extends the entire length of the horizontal bar. The faceguard has a pair of raised eyebrow areas, each raised eyebrow area consisting of one of the pair of side bar parts bent upwardly with respect to the center bar part, in the uppermost bar being positioned on either side of the front portion of the shell and above the lower edge of the front portion of the shell.

112. Systems and methods for monitoring a physiological parameter of persons engaged in physical activity

Date: 2018-10-23 | ID: 10105076

Abstract: The present disclosure provides system and method for monitoring of at least one physiological parameter of a person engaged in a physical activity, for example, an impact received by a player engaged in a contact sport such as football. The system includes a monitoring unit that actively monitors the physiological parameter of the person, wherein the monitoring unit generates an alert event when the monitored physiological parameter exceeds a threshold of the parameter. The monitoring unit determines whether the parameter exceeds an over-exposure threshold, wherein said threshold is based upon both a single incidence or cumulative incidences.

113. Computer-implemented methods and systems enabling fan participation in calling plays at sporting and other events

Date: 2018-10-30 | ID: 10112100

Abstract: Systems and methods are disclosed for determining a score for a user of a gaming platform such that the score reflects the user's success rate in calling plays in a sporting event. A computing device receives a user profile including a coach score and initiates a sequence of states, which include a poll creation state, a first notification state, a coach pick state, a fan voting state, a second notification state, and a play in action state. The computing device calculates a field score associated with the real-time play based

on an on-field result. The computing device updates a coach score and outputs content to the registered user computing device related to the coach score. The computerized method and system is not limited to football, and may also be applied to other live events such as soccer, baseball, golf, hockey, or basketball.

114. Football tackling training sled

Date: 2018-11-13 | ID: 10124228

Abstract: The football tackling training sled is a device that is used to train football players how to tackle during a football practice. The football tackling training sled is further defined with a backbone support that is attached to a base member via a spring-loaded counter hinge. The backbone support is encapsulated with a padding so as to be impacted via a user. The backbone support rests at an obtuse angle with respect to the base member. The backbone support includes a track, which interfaces with a floating t-bar. The user impacts the backbone support with a lateral force while the user drives the floating t-bar upwardly and along the track.

115. Sports helmet

Date: 2018-11-27 | ID: 10136692

Abstract: The present invention provides a protective sports helmet for a wearer engaged in a contact sport, such as football. The helmet includes a shell having a front region, a rear region, two side regions, and an ear flap depending from a side region. A jaw flap extends forwardly from each ear flap, wherein the jaw flap overlies an extent of a mandible of the wearer. The shell also includes a raised central band that extends from the front region across the crown to the rear region. The central band has lower side portions that extend from the rear region towards the side region of the shell and terminate proximate an ear opening in the shell. The central band has a width defined by a pair of opposed sidewalls that extend transversely from an outer surface of the shell. The shell also includes a first plurality of vent openings aligned along a first side of the raised central band and a second plurality of vent openings aligned along a second side of the band.

116. Protective sports helmet

Date: 2018-12-04 | ID: 10143257

Abstract: A football helmet includes a plastic shell with side regions having an ear flap with a face guard connector, an ear opening, a slot, and a snap connector. The helmet also includes an internal padding assembly removably connected to the plastic shell and including a jaw pad with a force attenuating layer. When the helmet is worn, a front edge of the jaw pad is positioned both in front of a coronal plane and below a basic plane of a head of the helmet wearer. A chin strap assembly releasably secures the helmet to the wearer and includes a lower flexible strap extending outwardly from each side of a central protective member.

When the helmet is worn, an extent of the lower flexible strap is received by the slot when said strap is affixed to the snap connector. The shell also includes a raised central band integrally formed as part of the shell and extending across the crown region to the rear region. An arrangement of elongated vent openings flank the raised central band.

117. Exercise ring for improving strength and flexibility of a body part

Date: 2018-12-04 | ID: 10143883

Abstract: An apparatus and method may exercise muscles of a body part, especially the neck, waist, torso, legs, and glutes from any angle with variable resistance while taking up minimal floor space. The apparatus may improve the ability of athletes, including football players and wrestlers, to better prepare for contact from any angle while engaged in their sport. The apparatus may include a ring having a guide track therein. Another inner ring may also be provided in different sizes and shapes to accommodate a variety of users. A car may be connected to a source of resistance ride freely along the guide track. The source of resistance may be other gym equipment including a bungee cord, a cable cross over machine, springs, and the like. As the user freely exercises by moving the body part, the car may adapt to the user's position to facilitate a full range of motion.

118. Sport gloves

Date: 2018-12-04 | ID: 10143909

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves intended to increase the overall performance in sports activities including but limited to football and golf. Primarily because of its unique finger configurations, and/or grip enhancers, and/or hand protective properties, the present invention makes a glove more operable in various sports activities.

119. Recreational device with rotor assembly

Date: 2018-12-11 | ID: 10150014

Abstract: Recreational footballs with rotor assemblies are provided herein. An example football includes a plurality of struts forming a prolate spheroid frame; and one or more rotor assemblies each having a plurality of blades, the one or more rotor assemblies being disposed within the prolate spheroid frame, the one or more rotor assemblies changing at least one aerodynamic aspect of flight of the recreational device when air passes through the prolate spheroid frame and rotates the plurality of blades of the one or more rotor assemblies.

120. System and method for recording and training athletes from multiple points of view

Date: 2018-12-18 | ID: 10158826

Abstract: A system and method for recording and training athletes uses multiple points of view For example, a new football training video in which a stationary camera (75 high) replaces the player (QB). The smooth (not jerky GoPro) easy to see video provides an unobstructed POV from the sightline of the QB (CorneaCAMCC) during the execution of live play. For confirmation of visual fields and analyzing the intentions of the defensive team, there are two other cameras videoing the same play. The user will have the capability to view the play from either of the two other angles in real time, to better understand, interpret and confirm what he thinks he sees at the CorneaCAM POV. All three POV's have freeze frame and slow motion capability.

121. Rotatable goal posts

Date: 2018-12-25 | ID: 10159881

Abstract: Rotatable and hinged goal posts are operably rotatable so that the goal post may rotated to a first position with the uprights being disposed toward a playing field such as for use when playing football, and to second position where the uprights being disposed away from the playing field such as for use when playing soccer. In addition, the rotatable and hinged goal posts are operably pivotable from a raised orientation and a lowered orientation, and vice versa.

122. Tubular projectile device

Date: 2019-01-22 | ID: 10183199

Abstract: Tubular projectile devices are disclosed herein. An exemplary tubular projectile device includes a spheroid frame having a long axis and a short axis. Further, the exemplary tubular projectile device includes a tubular medial section coupled with the spheroid frame; a first bicone comprising an exterior first cone congruent with an interior first cone, the first bicone being terminal along the long axis of the spheroid frame and coupled with the spheroid frame; and a second bicone comprising an exterior second cone congruent with an interior second cone, the second bicone being terminal along the long axis of the spheroid frame and coupled with the spheroid frame. The exemplary tubular projectile device may be a football.

123. Pallet threading apparatus

Date: 2019-01-22 | ID: 10183768

Abstract: A pallet threading apparatus including a directional handle; a flexible rod having a first end and a second end; a football shaped head member having a top portion and bottom portion, the top portion including a longitudinal slot; the directional handle is attached to the first end and the football shaped head

member is attached to the second end; a cleat element positioned in the longitudinal slot, the cleat element including a pair of side walls having a plurality of oppositely opposed teeth for retaining a section of strapping material.

124. Method and system for determining ball positions and first downs in a football game

Date: 2019-01-29 | ID: 10188933

Abstract: A method and system for use in the game of football to determine ball placement and position, as well as first down demarcations, is described, with various embodiments configured to track the location of a football to determine its position on the field and to determine and display the first down demarcation on the field. Certain embodiments employ software to assist in performing placement determinations, distance determinations, track movement of the ball, first down markers, as well as light emitting modules along a track that extends parallel to the field.

125. Football helmet having improved impact absorption

Date: 2019-02-12 | ID: 10201743

Abstract: A football helmet is disclosed that includes a shell constructed of fiber reinforced epoxy resin, a liner made from expanded polypropylene, an impact absorbing layer situated between the liner and the shell, and a face guard. The impact absorbing layer is constructed from either expanded polypropylene or a viscoelastic polymer encased in a suitable thin yet resilient and elastic membrane. An optional impact absorbing band is also shown disposed around the inner periphery of the liner and encircling the player's head. The impact absorbing band serves to reduce impact forces occurring from side helmet impact with objects or players.

126. Automobile rooftop mount

Date: 2019-02-12 | ID: 10202082

Abstract: The present disclosure teaches a device and method of vertically mounting a selected item on the roof of a automobile. The item may be put in a horizontal position when entering a garage or tunnel. The item may be a Christmas tree, a menorah, an oversized football helmet, ball, or anything else that can be positioned on a pole.

127. Detection of traumatic brain injury

Date: 2019-02-12 | ID: 10202649

Abstract: The present invention provides minimally invasive methods of detecting, diagnosing, and assessing neuronal damage associated with traumatic brain injury (TBI) or chronic traumatic encephalopathy (CTE). Specific species of microRNAs (miRNA), small, noncoding RNA molecules that play gene regulatory

functions, are correlated with cellular damage and oxidative stress following TBI or CTE, allowing for rapid, minimally-invasive diagnosis and assessment of brain injury. The early identification and longitudinal assessment of neuronal damage in subjects suffering from or at risk of suffering from a TBI (e.g., football players, boxers, military personnel, fall victims) will improve clinical outcomes by guiding critical medical and behavioral decision making.

128. Casino wagering game with player selected conditions

Date: 2019-02-12 | ID: 10204470

Abstract: A method, apparatus, and computer readable storage medium to implement a wagering method using at least one electronic random number generator which simulates dice. The method can simulate a game of football which is based purely on player decisions and random outcomes of the random number generator. Different sequences of the method can be initiated based on outcomes of the random number generator.

129. American-style football including electronics

Date: 2019-03-05 | ID: 10220264

Abstract: An American style football including an inflatable prolate spheroidal shaped bladder, a cover assembly, a lacing and an electronic circuit. The bladder includes a valve assembly and a pocket that are symmetrically spaced about a longitudinal plane. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder. One of the first and fourth cover panels extending over the valve assembly and the other of the first and fourth cover panels extending over the pocket. The lacing extends along the longitudinal plane and coupled to the first and fourth cover panels. The electronic circuit is retained by the pocket. The electronic circuit includes at least one sensor and the electronic circuit being configured to produce a signal to enable at least one characteristic of the football to be monitored during use.

130. Protective shoulder pads with release mechanism

Date: 2019-03-05 | ID: 10220291

Abstract: Protective shoulder pads to be worn by an individual engaged in a contact sport, such as football, lacrosse or hockey, are provided. The shoulder pads protect an individual wearing the protective shoulder pads against impact to the superior, anterior, posterior and/or lateral regions of the shoulder and upper arm regions. The shoulder pads include a release mechanism that releasably couples left and right arch members of the shoulder pads and allows for removal of the shoulder pads from the individual while he or she is maintained in the supine position, thus decreasing the risk of further injuring the individual wearing the

protective shoulder pads.

131. Refrigerator cover

Date: 2019-03-12 | ID: 10228181

Abstract: Some implementations can include a refrigerator cover having a body portion with a first side, a second side and a top. The first side, second side and top each having generally flat interior surfaces defining an interior space of the cover and each having generally rounded exterior surfaces formed so as to generally resemble a football helmet. The cover can also include a front door attached to the body portion via one or more rotational members, the front door having a generally flat rear surface adjacent a front opening of the body portion when the front door is in a first position, the front door having a protruding member extending from a front surface, where the protruding member is formed generally in a shape of a football helmet face guard.

132. Lens protection systems

Date: 2019-03-12 | ID: 10228494

Abstract: The present disclosure features lens protection systems that comprise multi-layer film laminates that include an optically clear protective film, which remains on the lens during use and carrier layers that are used to assist the user with applying the protective film to the lens. These systems are suitable for use with a wide variety of eyewear, including but not limited to ski goggles, tactical goggles, diving goggles, protective eyewear such as safety glasses, sun glasses, helmet visors (e.g., for football, hockey, or motorcycle helmets), and paintball masks.

133. American-style football including electronics

Date: 2019-03-26 | ID: 10238922

Abstract: An American style football including an inflatable prolate spheroidal shaped bladder, a lining positioned over the bladder, a cover assembly, a lacing, and an electronic circuit positioned between the lining and the cover assembly and generally aligned with the lacing. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder and the lining. The lacing is coupled to the first and fourth cover panels. The electronic circuit includes at least one sensor and the electronic circuit is configured to produce a signal to enable at least one characteristic of the football to be monitored during use.

134. Impact absorption padding for contact sports helmets

Date: 2019-03-26 | ID: 10238950

Abstract: There is disclosed an improved impact absorption padding for a contact sports helmet, for contact sports such as football, hockey and lacrosse, which incorporates a plurality of air pockets formed from a resiliently flexible material, such as plastic or rubber. At least some of the air pockets enclose a coil or spring. The coil or spring is also resiliently flexible over a wide range of temperatures, and oriented to compress in the general direction of impact to absorb a substantial portion of the energy before it is transferred to the head of the player. The coil or spring is also sized and shaped to return the air pocket to a desired thickness and shape after an impact. The air pockets may be arranged to substantially cover the outside of a contact sports helmet shell as a layer of impact absorption padding. A second inner layer of impact absorption padding may also be provided inside the contact sports helmet shell.

135. Delivery system for targeted launching of sports projectile

Date: 2019-04-09 | ID: 10252139

Abstract: A sports projectile delivery system may control the operation of a launcher to cause an American football or other sports projectile to be delivered to a target location on a field. In some aspects, the system can track player movements on the field, e.g., through the use of a tracking device mounted on the player, enabling the ball etc. to be launched to a player in anticipation of where the player will go. The system may include additional customization and/or logging options, e.g., permitting a player to designate a body position (e.g., above the head or near the knees) for delivery of the ball, designate a speed or hang time for delivery, or provide player data and analytics to an online or otherwise connected database.

136. Protective headgear and shoulder pad apparatus and methods

Date: 2019-04-16 | ID: 10258097

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

137. Football helmet with cheek supports

Date: 2019-04-16 | ID: 10258098

Abstract: A football helmet has a shell made of polycarbonate or ABS plastic or thermoplastic composite material and two cheek supports, each removably connected to an earflap. Each cheek support comprises an

outer brace, an inner plate removably connected to the outer brace by fasteners passing through through-going holes formed in the earflap, and a cheek pad attached to the inner plate. The outer brace has a lower edge having a contour shaped to follow a contour of the lower edge of the earflap without extending substantially beyond the lower edge of the earflap. The inner plate has a lower edge having a contour shaped to follow the contour of the lower edge of the earflap without extending substantially beyond the lower edge of the earflap and an extension extending from a body of the inner plate and beyond the front edge of the earflap. A cheek pad is removably attached to the inner plate and positioned to overlay the cheek of a wearer. The cheek supports improve retention of the helmet and provide protection to the cheek area against blows.

138. Football helmet with raised plateau

Date: 2019-04-16 | ID: 10258100

Abstract: A football helmet has a rigid plastic football helmet shell with a single raised plateau in the crown portion of the shell extending from the front portion, over the crown portion, toward the back portion. The raised plateau has a left border and a right border. The left border is composed of a plurality of segments and extends continuously from the front portion, over the crown portion, toward the back portion. The segments of the left border including at least a first segment and second segment, which meet to form an angle. A non-circular first ventilation hole through the shell has at least a first side, a second side, and a third side, and is positioned at the angle, such that the first side is adjacent to the first segment and the second side is adjacent to the second segment. The first segment extends beyond the first ventilation hole by a first distance at least as long as the first side and the second segment extending beyond the first ventilation hole by a second distance at least as long as the second side.

139. Tackle indicating assembly

Date: 2019-04-16 | ID: 10258855

Abstract: A tackle indicating assembly for flag football players includes a belt that is configured to position around and couple to a waist of a user. Each of a plurality of straps has a terminus that is configured to selectively magnetically couple to the belt. The straps are configured to be grasped in a hand of a tackler so that each strap is positioned to separate from the belt to indicate a tackle of the user.

140. Football snapper

Date: 2019-04-23 | ID: 10265598

Abstract: A portable automatic football snapper may be built as a tube to launch football snaps while being lightweight and able to be carried by handle, shoulder-strap, or clipped onto another backpack. The snapper

is small and can store a football within, and, when stood upright, may serve as a stand for a football placed on top to simulate an under center exchange. A stand built into a side of the bag extends to establish a base and ideal snap angle for shotgun snap use. Inside the snapper, a cup may be used to hold the football, may be pulled down and clipped into a pre-snap position, and upon release is pulled upwards, launching or snapping the ball in a spiral to the quarterback. The release may be manual, automatic based on a mechanical or electronic timer, or sound-activated or remote controlled allowing snap control by the quarterback.

141. Protective sports helmet

Date: 2019-04-30 | ID: 10271605

Abstract: A protective sports helmet that includes an energy attenuating faceguard connection system, which includes at least one connector that secures the faceguard to the helmet shell without a connection point in the shell's brow region. The sports helmet can be configured as a football helmet to be worn by a player and where the lack of a brow region connection point results in a gap or clearance between the faceguard and the shell that has a functional interplay with the connector upon an impact to the faceguard. The football helmet has a unique collection of helmet shell features that include an arrangement of a raised central band, lateral ridges, frontal vent openings and rear vent openings.

142. Heat providing football glove

Date: 2019-05-14 | ID: 10285462

Abstract: A heatable football glove that provides heat to a wearer's hand. The glove includes a body member that includes a pocket therein to accommodate a heating element of substantially the same size as the pocket such that the heating element after activation is introduced through an opening into the pocket where it is snugly received therein and conforms to the pocket in order to be retained therein substantially without movement during use of the glove. A covering member that is selectively movable between open and closed positions is provided for closing the opening and retaining the heating element in the pocket during use of the glove. An attachment member is associated with the covering member for releasably attaching or adhering the covering member to the glove to retain the heating element in the pocket during use.

143. Football helmet with shell section defined by a non-linear channel

Date: 2019-05-14 | ID: 10285466

Abstract: A football helmet comprising a one-piece shell and an energy absorbing layer includes a crown portion, a front portion, a left side portion, a right side portion, and a rear portion. The shell has a non-linear channel spaced in its entirety from an edge of the shell that partially surrounds and defines a shell section

within the front portion such that the shell section is moveable relative to the remainder of the shell upon the shell section receiving an impact energy to dampen the impact energy.

144. Modular helmet apparatus and system

Date: 2019-06-04 | ID: 10306944

Abstract: Embodiments of the present disclosure provide for a modular helmet apparatus and system comprised of a removable outer shell disposed on an inner frame. The disclosed football helmet provides for enhanced energy diffusion through the use of one or more energy diffusion areas disposed on an outer shell of the helmet, the one or more energy diffusion areas being configured to align with the energy diffusion zones of the frame. Embodiments of the present disclosure enables a user to quickly and easily replace or swap the outer shell of the helmet with a second or replacement shell by selectively coupling the desired outer shell with the frame.

145. Football training device and method

Date: 2019-06-04 | ID: 10307655

Abstract: A football training device for replicating a defensive rush includes a base frame, a plurality of obstacles extending upward from the base frame, and one or more wheels supporting the base frame. A method of training an offensive football player using the device includes positioning an offensive football player being trained on front of the training device, initiating a drill where the offensive football player carries out a conventional football play, and while the offensive football player carries out the conventional football play, moving the training device, relative to the offensive football player, such that the obstacles simulate a defensive rush toward the offensive player, thereby creating a visual and physical barrier to the completion of the conventional football play.

146. Football receiving and throwing machine

Date: 2019-06-18 | ID: 10322329

Abstract: A machine and method for receiving and launching an oval football. The machine includes a football catch area, a motorized belt to orient the football and motorized wheels to launch the football. The user catching the football throws it back to the machine. The machine automatically orients the football and launches it back to the user catching the football. The machine provides the user a consistent timing pause between receiving the football and launching of the football.

147. Tournament based on poker-like games based on live sporting events

Date: 2019-07-09 | ID: 10347085

Abstract: A tournament played over a network consisting of rounds (hands) of a poker-like game based on the action in one or more live sporting events. The number of hands played, and the timing of those hands, are the same for every player in the tournament, and are independent of the number of players in the tournament. The number of players in the tournament can be arbitrarily large or small. The prize structure can also be independent of the number of players, and announced in advance. The tournament is preferably based on a collection of closely associated betting events, like the drives in a single football game; or a collection of closely associated sporting events. The poker-like games played in each round of the tournament utilize chips where the winners of the tournament are the players with the largest chip counts at the end of the tournament.

148. Football helmet

Date: 2019-07-16 | ID: 10349696

Abstract: A helmet having an inner shell with a first projection and a second projection, an outer shell, and at least one shock absorption system. Each shock absorption system comprises a first recess disposed in the first projection, a second recess disposed in the second projection, and a leaf spring having a first leg, a second leg, and a curved middle portion. The first leg is received by the first recess and the second leg is received by the second recess. The leaf spring is adapted to flex and extend into the first and second recesses in response to an external impact to the helmet. The inner shell and outer shell may be composed of a synthetic fiber. The shock absorption system may also include a compression spring disposed between a flange of the leaf spring and the second projection of the inner shell.

149. Articles of sports apparel with support elements

Date: 2019-07-23 | ID: 10357067

Abstract: Articles of sports apparel may include elongate support elements. Particular examples provided are swimsuits and other sports apparel such as sports apparel for rugby football. An Article of sports apparel may include at least one base portion adapted to be arranged proximate a lower back of a user when worn, and at least three elongate support elements. The at least three elongate support elements may be arranged at the base portion such as to extend outwardly from a region at least partially encompassing the lower back of the user when worn.

150. Impact attenuation system for a protective helmet

Date: 2019-07-23 | ID: 10357075

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by

removing material from the front portion. The impact attenuation member changes how a portion of the shell having the impact attenuation member responds to an impact force having a component applied substantially normal to the impact attenuation member as compared to how the left and right side portions respond to the impact force.

151. Padding assembly

Date: 2019-08-06 | ID: 10369452

Abstract: A padding assembly for a helmet includes a plurality of pads that is configured to couple to an external surface of the helmet, such as a football helmet. The pads are configured to absorb a force from an impact to the helmet when the helmet is positioned on a head of a user. The force of the impact to the head of the user is reduced.

152. Surface underlayment system with interlocking resilient assemblies of shock tiles

Date: 2019-08-06 | ID: 10369739

Abstract: A surface underlayment system and its method of manufacture that is sandwiched between an impact-receiving upper surface and a lower foundation. The energy absorbing system has subassemblies of interconnected modules that cooperate to absorb and distribute impact forces applied thereto. Each module has one or more frustoconical support structures. At least some of the frustoconical support structures have bases that underlie the upper impact-receiving surface such as a golf putting green, a football field, marine decking, and senior living flooring.

153. Football helmet with raised plateau

Date: 2019-08-13 | ID: 10376011

Abstract: A football helmet has a rigid plastic football helmet shell with a raised plateau of the shell extending from the front portion, over the crown portion, toward the back portion. This raised plateau is the only raised plateau of the shell which begins in the front portion, extends over the crown portion, and ends in the back portion. The raised plateau has a left border and a right border. The left border is composed of a plurality of segments and extends continuously from the front portion, over the crown portion, toward the back portion. The segments of the left border including at least a first segment and second segment, which meet to form an angle. A non-circular first ventilation hole through the shell has at least a first side, a second side, and a third side, and is positioned at the angle, such that the first side is adjacent to the first segment and the second side is adjacent to the second segment. The first segment extends beyond the first ventilation hole by a first distance at least as long as the first side and the second segment extending beyond the first ventilation hole by a second distance at least as long as the second side.

154. System for digital yearbook

Date: 2019-08-13 | ID: 10380102

Abstract: A system and method for providing meeting services in a digital yearbook includes a server and a user device for presenting media content. User interfaces are provided to each user for specifying tendencies, skills and likes of each of the yearbook users and for specifying desired tendencies, desired skills and desired likes of another of the yearbook users who a yearbook user would like to meet. The desired tendencies, skills, and likes contrasts the tendencies, skills and likes of the yearbook users so as to find a friend with differences, thereby balancing and contrasting those of the yearbook user. For example, tendencies are introverted/extroverted, skills are math/science, and likes are music/football, etc.

155. Method, system, and computer program product for sports game

Date: 2019-08-27 | ID: 10395483

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

156. Football sensing

Date: 2019-09-03 | ID: 10398945

Abstract: A football sensing system may include an American-style football extending along a longitudinal axis and having a maximum transverse dimension defining a transverse axis and at least one accelerometer. The football has a bladder and a cover about the bladder. The accelerometer is carried by the football between the bladder and the cover to sense acceleration along at least a first axis. The accelerometer is sized to sense a predetermined maximum value of acceleration in the first axis. The accelerometer is positioned within the football in a first position with the first axis of the accelerometer angled with respect to the longitudinal axis of the football. The accelerometer in the first position is capable of measuring acceleration values in a direction in line with or parallel to the longitudinal axis of the football that are greater than the predetermined maximum value of acceleration in the first axis.

157. Method, system, and computer program product for interactive sports game

Date: 2019-09-03 | ID: 10403094

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

158. System and methods providing sports event related media to internet-enabled devices synchronized with a live broadcast of the sports event

Date: 2019-09-24 | ID: 10425613

Abstract: An electronic device can be synchronized with a broadcast of a live sporting event to obtain supplemental sports data over a data network from a server storing data associated with the live sporting event. Supplemental sports data is obtained from the server for display on the electronic device following a triggering activity associated with the broadcast of the live sporting event. Supplemental sports data can be transmitted for rendering on a display associated with the electronic device. Supplemental sports data can include display of an instant replay video of a sports athlete combined with audio of a pre-recorded statement by the sports athlete associated with the instant replay video, an announcement of a score change for a sporting event monitored by the electronic device, and a display of a football widget providing updates on football game status (e.g., possession, ball location, current score) monitored by the electronic device.

159. Modular football helmet apparatus and system

Date: 2019-10-01 | ID: 10426212

Abstract: Embodiments of the present disclosure provide for a modular helmet apparatus and system comprised of a removable outer shell disposed on an inner frame. The disclosed football helmet provides for enhanced energy diffusion through the use of one or more energy diffusion areas disposed on an outer shell of the helmet, the one or more energy diffusion areas being configured to align with the energy diffusion zones of the frame. Embodiments of the present disclosure enables a user to quickly and easily replace or swap the outer shell of the helmet with a second or replacement shell by selectively coupling the desired outer shell with the frame.

160. Game system and method utilizing outcomes of live events, including sporting events

Date: 2019-10-08 | ID: 10438449

Abstract: A bingo-like game system and method utilizing bingo-like game cards depicting a grid formed of a

plurality of spaces identifying outcomes associated with a live event such as a football game. A game system comprises a series of unique game cards with each game card depicting a grid formed of a plurality of spaces wherein the spaces identify outcomes associated with a live sporting event. Real time outcomes associated with the live sporting event dictate which matching spaces on the unique game cards are marked automatically or manually. Pre-established patterns of marked spaces determine winners of the game. The system further generates game cards having similar odds of winning based on the arrangement of possible outcomes associated with the live event.

161. Football helmet with movable flexible section

Date: 2019-10-22 | ID: 10448691

Abstract: A protective helmet comprises a shell comprising a non-linear slit at least partially surrounding and defining a flexible section movable relative to the shell. The helmet further comprises an energy absorbing layer contacting an inner surface of the shell and an inner surface of the flexible section. Internal padding is operably coupled to the energy absorbing layer. The shell has a perimeter, and the non-linear slit does not extend to the perimeter of the shell. The flexible section moves relative to the shell upon the helmet receiving an impact energy to dampen the impact energy.

162. American-style football including electronics

Date: 2019-11-05 | ID: 10463921

Abstract: An American-style football having a major longitudinal dimension extending about a longitudinal axis and including an inflatable prolate spheroidal shaped bladder, a lining positioned about the bladder, a cover assembly, a lacing and a thin electronic tag. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder and the lining. The lacing extends along a longitudinal plane extending through the longitudinal axis and is coupled to the first and fourth cover panels. The tag is positioned between the lining and the cover assembly. The tag is covered by at least one of the first and fourth cover panels but not covered by the second and third cover panels. The tag is configured to enable at least one characteristic of the football to be monitored during use. In another example implementation, the tag is positioned between the lining and the bladder.

163. Football tackling practice assembly

Date: 2019-11-05 | ID: 10463938

Abstract: A football tackling practice assembly for learning a safe tackling method includes a pair of tubes, a crossbeam, and a dummy. Each tube comprises a plurality of nested sections so that the tube is selectively extensible. The crossbeam is coupled to a top of each tube and extends between the tubes. Each of a pair of

bases is coupled to and extends perpendicularly from a bottom of a respective tube. The bases are configured to support the tubes perpendicularly to a surface. A first fastener is coupled to the crossbeam. A second fastener is coupled a helmet that is coupled to a head of the dummy. The second fastener is complementary to the first fastener and is positioned to reversibly couple to the first fastener to couple the dummy to the crossbeam so that the dummy is configured to be tackled by a user.

164. Sporting field measurement system

Date: 2019-11-05 | ID: 10466051

Abstract: A sporting field measurement system is disclosed wherein a user is prompted to select, on a mobile device, a field for marking from various sporting field types including, but not limited to football, baseball, softball, soccer, lacrosse, track, tennis, basketball, cricket, polo, rugby, Australian football, volleyball, and badminton. The Global National Satellite System (GNSS) or at least the global positioning system (GPS) is used to locate a user's device. An application displays, on a display, of the mobile device, the dimensions of the specified sporting field as an overlay on a map, generated by the positioning system and it will communicate with the GNSS or GPS of the device to allow the user to track his or her movement along a specified path of a proposed field. This will allow the user to place the appropriate markers and/or paint the field. Deviations from the path may be indicated on the display of the mobile device or by an audio indication generated by the mobile device.

165. Football helmet with movable shell segment

Date: 2019-11-12 | ID: 10470514

Abstract: A protective helmet comprises a shell having an inner surface and an outer surface, and a shell segment movable relative to the shell; an energy absorbing layer having an inner surface, and an outer surface which contacts the inner surface of the shell; and internal padding operably coupled to the inner surface of the energy absorbing layer. The shell has a perimeter and the shell segment is formed by at least one slot channel in the shell which does not extend to the perimeter of the shell. The shell segment moves relative to the shell upon the helmet receiving an impact force. The slot channel is generally U-shaped.

166. Football helmet with pressable front section

Date: 2019-11-12 | ID: 10470515

Abstract: A protective helmet comprises a shell made of plastic and having a raised central region oriented from a front of the shell towards a rear of the shell, a first vent opening adjacent to the raised central region on a left side of the raised central region, a second vent opening adjacent to the raised central region on a right side of the raised central region, a pressable front section created by a non-linear slit through the shell,

which does not extend to an edge of the shell, ear holes formed in the shell; and an energy absorbing layer protected by the shell and having an outer surface.

167. Impact attenuation system for a protective helmet

Date: 2019-11-12 | ID: 10470516

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member changes how a portion of the shell having the impact attenuation member responds to an impact force having a component applied substantially normal to the impact attenuation member as compared to how the left and right side portions respond to the impact force.

168. Helmet for impact protection

Date: 2019-11-19 | ID: 10477909

Abstract: A helmet for protecting a head of a wearer, such as a hockey, lacrosse, football or other sports player. The helmet includes an outer shell and an inner padding disposed between the outer shell and the wearer's head when the helmet is worn. The inner padding includes a plurality of shock absorbers and an interconnector interconnecting the shock absorbers, each shock absorber being deformable in response to a rotational impact on the helmet such that an outer part of the shock absorber moves relative to an inner part of the shock absorber in a direction tangential to an angular movement of the outer shell due to the rotational impact.

169. System and method for real-time personnel fatigue level monitoring

Date: 2019-11-19 | ID: 10478095

Abstract: The present invention relates to analyzing fatigue level of users by transmitting pressure data from user's shoes wirelessly for real-time monitoring. Athletes for in body-contact games such as football, are often suddenly forced out of games due to injuries as it is often difficult to ascertain the nature of the injury on the field. The present invention enables a coach to have an ability to monitor performance of the athletes as they play, thus help in determining current level of athlete's injury, and help in preventing career threatening and/or fatal injuries. Further, pressure sensors can be used to determine fatigue detection and can be verified by readings from knock sensor, accelerometer data, etc. Variations in all such sensors for a time slice t-seconds can be used as an indicator for fatigue.

170. Breakaway facemask system

Date: 2019-11-26 | ID: 10485285

Abstract: A breakaway facemask system for reducing injuries from a facemask penalty in American football includes a helmet that is worn during athletic activities. A cage is removably coupled to the helmet. The cage is positioned to cover to the opening thereby protecting a user's face from impact. A plurality of retainers is provided and each of the retainers is coupled to the helmet. Each of the retainers releasably engages the cage such that the cage is removably coupled to the helmet. The cage breaks away from the helmet when the cage is gripped thereby reducing the possibility of injury to the user.

171. Device and method for properly locating the YardLine numbers of a football field

Date: 2019-11-26 | ID: 10486053

Abstract: A template for properly determining the positions for the yardline numbers of an American-style football field includes a generally rectangular frame having an external perimeter and an internal opening defined by an internal perimeter. The shape of the internal opening, and the corresponding shape of the internal perimeter, is such that for each of the yardline numbers, i.e. 5, 4, 3, 2, 1, and 0, the internal perimeter defines a plurality of locations for abutting a corresponding plurality of outer edge portions of the yardline number. With the external perimeter appropriately aligned along one or more lines of the field, the frame can be used to properly locate any one of the six yardline numbers that are needed to properly locate all of the yardline numbers on an American-style football field. This frame reduces the number of templates needed to locate the yardline numbers of a football field, and also simplifies the process of properly locating the yardline numbers.

172. Football helmet with recessed face guard mounting areas

Date: 2019-12-17 | ID: 10506841

Abstract: A protective football helmet is provided having a face guard mounting system with at least one pair of opposed recessed mounting regions that ensure a low-profile mounting arrangement for a face guard to the helmet. The recessed mounting regions are formed in both the inner and outer surfaces of the helmet shell along a frontal opening in the shell. As a result of the streamlined frontal appearance provided by the face guard mounting system, the width of the face guard closely corresponds to the width of the helmet at the recessed mounting regions.

173. Antler wall mount assembly

Date: 2020-01-07 | ID: 10525764

Abstract: An assembly for mounting deer antlers is provided, the assembly generally comprising an enclosure, the enclosure generally shaped like a game ball such as a football, and comprising a front portion

and a rear portion, the enclosure being adapted to couple end portions of main beams of the antlers to an inside surface of the enclosure rear portion such that portions of the antlers extend through lateral holes, to an area outside the enclosure, the enclosure front and rear portions being removably coupled to one another.

174. Telescoping football holder

Date: 2020-01-14 | ID: 10532262

Abstract: A compact device for assisting place kicking a football is disclosed, including a module connecting telescoping legs and football tip telescoping holding arm, with the legs connecting the module for pivoting the legs from a ground engaging position to a transport position beneath and parallel to the arm.

175. Football helmet having three energy absorbing layers

Date: 2020-01-28 | ID: 10542788

Abstract: A football helmet is disclosed that includes a shell constructed of fiber reinforced epoxy resin, a thin resilient outer liner adjacent the inner shell surface, a thicker resilient middle liner and a thin resilient inner liner. The three liners are preferably fabricated from expanded polypropylene or suitable substitute having comparable resilient energy absorbing properties. The inner and outer liners are made from higher impact absorbing material than the impact absorbing material of the middle liner. The helmet also includes fitment pads, jaw pads, a face mask, and moisture absorbing cloth material.

176. Sports awareness vest

Date: 2020-02-04 | ID: 10549167

Abstract: A system, device, and method are provided herein for remotely trigger a light on an awareness article. In some embodiments, the awareness article is a vest used by football players where a plurality of awareness vests are in electronic communication with an electronic device. A coach can control activation of the light on each awareness vest such that, for example, a quarterback can throw a football to the person wearing the awareness vest with the activated light. Various other aspects of the system, device, and method are described herein, and other applications of the awareness vest can include other sports such as soccer and hockey, dog training such as hunting and schutzhund, and military training such as war games, target practice, and enemy identification.

177. System and method of penalty data compilation, analysis and report generation

Date: 2020-02-04 | ID: 10553124

Abstract: The present invention relates generally to a system and method for reviewing and evaluating performance. In particular, the present invention relates to a system, method, and computer program produce

for reviewing and evaluating performances of an official or group of officials at an event or events. Even more specifically, according to embodiments of the present invention, the system and method can involve reviewing and evaluating an official or group of official's performance during a sporting event or events, such as a football game or games or a basketball game or games.

178. Protective headgear and shoulder pad apparatus and methods

Date: 2020-02-11 | ID: 10555575

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

179. Oval football receiving and launching machine and method

Date: 2020-02-18 | ID: 10561905

Abstract: What is provided is a football catching and throwing machine and method that includes an inclined upwardly angled path. The machine includes a collector configured to receive a football thrown into it; a ball translator configured to align the football and transport the football up the inclined path to a football accelerator that launches the football into the air; and a motor that operates the football accelerator.

180. Partial fingered gloves for football or golf play

Date: 2020-02-25 | ID: 10569154

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves and the use of said gloves, intended to increase the overall performance in sports activities including but limited to football and golf. Because of its unique finger configurations, grip enhancers, and/or its hand protective properties, the present invention makes a glove now operable on a football quarterback's throwing hand and on golfers dominant hand, for example.

181. Method and system for playing a bowling game in combination with a game of football as a secondary game

Date: 2020-02-25 | ID: 10569157

Abstract: A method and system for playing a bowling game in combination with a football-type game is disclosed. The method and system comprising the steps of initiating a conventional bowling game, filling at least one bowling frame, evaluating a bowling score for at least one bowler, generating a football play result based on the bowling score, displaying a football position based on the football play result, continuing the bowling game and generating the football play result until a 10th frame of bowling is completed, determining a winning football team, and providing an award to the winning football team.

182. Supporting element for shoes

Date: 2020-03-03 | ID: 10575585

Abstract: Described are supporting elements for a shoe, in particular for soccer shoes or American football shoes, as well as a sole and a shoe with a supporting element. The supporting element includes a first bending stiffness for bendings from an initial unbent state up to an upper end of a threshold angle range, and a second bending stiffness for bendings beyond the upper end of the threshold angle range, wherein the second bending stiffness is greater than the first bending stiffness.

183. System and methods of objectively evaluating football player tackling performance

Date: 2020-03-03 | ID: 10576349

Abstract: A system is provided for evaluating football player tackling performance of learned skills in a competitive in-game setting. The system includes reviewing video footage of football games, and analyzing each tackle opportunity with clear objectives for the player with the tackling opportunity to satisfy to achieve a successful result. The system also includes a visual tool that provides clear context for analysis of each tackle opportunity. Methods of evaluation are also provided.

184. Rich data types

Date: 2020-03-03 | ID: 10579724

Abstract: The present disclosure is directed to systems and methods for implementing rich data types in a spreadsheet application. Generally, a value being of a rich data type is as a type of value that has context and established relationships with other types of data. In particular, a rich data type is a data value having associated context, which may be units (e.g., inches, miles, meters, kilograms, seconds, joules, hertz, Fahrenheit, etc.) or other information about the data's type (e.g., city, stock, NCAA football team, car, restaurant, school, etc.). Additionally, a value being of a rich data type further includes established relationships with other types of data.

185. Football helmet with impact attenuation system

Date: 2020-03-10 | ID: 10582737

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member is purposely engineered to change how the front portion responds to an impact force applied substantially normal to the front portion as compared to how other portions of the shell respond to that impact force. In one version, the impact attenuation member is a cantilevered segment formed in the front portion of the shell.

186. Method and system for motion data processing

Date: 2020-03-10 | ID: 10582884

Abstract: A method for motion data processing includes: sensing a plurality of motion data of football player by a magnetic football and magnetic sensors; according to the motion data, analyzing the player's motion trajectory by a processing chip, and identifying whether the player's kicking motion is sliding tackle, smashing or dribbling.

187. Method of making textured sports ball

Date: 2020-03-10 | ID: 10583332

Abstract: A sports ball (10), such as a football (12), has outer panels (14) of leather. The outer panels (14) have embossed pebbles (16) to enhance grip. Each outer panel (14) is formed by embossing the pebbles (16) on a segment (54) forming one or more of the outer panels (14) after the segment (54) has been cut from the unembossed full hide or half hide from which it comes. This provides great advantages in flexibility and consistency of manufacturing in addition to improved performance such as grip and aerodynamics.

188. System and method for providing an alert on delivering digital content

Date: 2020-03-10 | ID: 10587933

Abstract: The present invention discloses a system and method for providing an alert on delivering a digital content such as when an interesting digital content is imminent, for example, the beginning of a play during a football game, to direct the focus of one or more viewers towards the digital content. The present invention is further configured to embed a commercial message in conjunction with the alert on directing the focus of the viewers. The system is adapted to activate the alert either manually or automatically. Further, the system is optionally implemented with an artificial intelligence (AI) system, which is trained using deep learning to recognize the appropriate time to automatically trigger the alert/commercial message sequence. The AI system could be trained by monitoring the manual control of alert activation.

189. Lewis helmet

Date: 2020-03-24 | ID: 10595577

Abstract: A protective football helmet is provided having a two-piece mold shell diminution shell system.The helmet is comprised of a nine-piece part outer shell, a solid rim outer shell to deflect direct impact from the nine piece part outer shell, an inner liner helmet, compression springs as shocks, and a spin dial to control and restrict the movement of the compression springs and nine piece part outer shell. The nine piece part is a special designed helmet to absorb impact on contact from the crown of the helmet, all four sides and all angles in between to protect the players' head from direct contact at any angle. The outer shell diminution system is piece parted to absorb the impact energy individually by the outer shell protection. Each outer shell piece parted section takes on the impact of energy with an oval shape to deflect and transfer contact impact energy from one piece part to another, thereby dispersing the energy throughout the outer shell of the helmet.

190. Novelty football audio apparatus

Date: 2020-03-24 | ID: 10596420

Abstract: A novelty football audio apparatus for playing fight songs to show school pride includes a football body having a football-shaped skin forming an inner cavity. The skin has an exterior, an interior, and an access aperture extending through to the inner cavity. An access panel is coupled to the football body to cover and alternatively uncover the access aperture. A set of imitation laces is coupled to the football body and is configured to represent laces from a real football. An electronics housing is coupled to the interior of the skin within the inner cavity beneath the access aperture. A tone generator coupled within the electronics housing. A speaker is coupled within the skin above the electronics housing and is in operational communication with the tone generator. A power button is coupled within the skin above the electronics housing and is in operational communication with the tone generator.

191. Drive shaft

Date: 2020-03-24 | ID: 10598210

Abstract: A drive shaft is formed by welding two spline shaft heads to a hollow middle section of tubing. The spline shaft head includes teeth which are crowned to permit an angular offset of the drive shaft relative to cylindrical splines of connectors, such that the end faces of the teeth define a barrel shape. The teeth of the spline shaft head include a side face curvature, defining a football-shaped tooth cross-section. Torque is rotationally transmitted across a permitted angular offset of the drive shaft relative to cylindrically arranged linear splines of drive and driven connectors (i.e., relative to the engine output axis of rotation and the differential input axis of rotation), thereby avoiding the use of prior art universal joints.

192. Anti-concussion collar assembly and method of use

Date: 2020-03-31 | ID: 10602793

Abstract: An anti-concussion helmet attachment collar assembly includes a cowl body attached to a curved helmet attachment ring segment at its upper end, and to a cowl support ring at its lower end. A circular rolling element bearing is interposed between the bottom of the cowl support ring and the interior shoulder of an underlying central ring, facilitating rotation of the cowl support ring with respect to the central ring. A modified helmet incorporates a flange with keyhole openings coupleable with standoff rivets on the helmet attachment ring segment. A base attached to equipment, such as football shoulder pads, is configured to selectively couple with the central ring during use.

193. Kicking tee for football and rugby

Date: 2020-04-07 | ID: 10610758

Abstract: The invention discloses a kicking tee for American football or rugby that maximizes the possible forward lean of the football which extends the segment of impact through the ball while also exposing the entire ball from base to tip to the view of the kicker, allowing the kicker to more easily aim at the ball's sweet spot. The results achieved by use of the present invention are greater distance and height, velocity and hangtime, as well as greater control of the trajectory of the ball over that of the prior art. The invention also improves on the prior art by allowing a greater overall range of ball placement, resulting in the kicker having greater control over where the ball will travel on the field of play.

194. System and method for enhancing fan experience when attending a sporting event such as a football game or a music concert at a stadium

Date: 2020-04-21 | ID: 10625656

Abstract: System for enhancing fan experience comprises a stadium having a field area, a pathway extending along at least a portion of the field area, and a vehicle adapted to move along the pathway, the vehicle being adapted to transport sports fans situated within the vehicle simultaneously along the pathway during a sports event or concert go-ers situated within the vehicle simultaneously along the pathway during a music concert, to provide a view to the sports fans riding in the vehicle from amongst and/or in close proximity to the players in a sideline area on the field area during a sports event, and to provide a view to concert go-ers riding in the vehicle from close proximity to a stage located on the field area and the performers on the stage during a music concert.

195. Simulated American football game

Date: 2020-04-28 | ID: 10632364

Abstract: A simulated American football game, with a particular gaming surface, and methods of play are described. The gaming surface may include an elongate I shaped field that may include a simulated field region bounded by two opposing simulated play regions in a same plane. The simulated field region may simulate a 100 yard American football field and may include LED lighting to track a line of scrimmage and to track a first down yard marker target. The two opposing simulated play regions may provide for a diversity and plurality of various play outcomes that may dictate certain gameplay results when a slider comes to rest mostly over a given target or region. The slider may be slid from one opposing simulated play region, across the simulated field region to the other opposing simulated play region. In some embodiments, defensive blocking obstacles may be used to intentionally increase gameplay difficulty.

196. Notifications for rich data types

Date: 2020-05-05 | ID: 10642930

Abstract: The present disclosure is directed to systems and methods for implementing notifications for rich data types in a spreadsheet application. Generally, a value being of a rich data type is as a type of value that has context and established relationships with other types of data. In particular, a rich data type is a data value having associated context, which may be units (e.g., inches, miles, meters, kilograms, seconds, joules, hertz, Fahrenheit, etc.) or other information about the data's type (e.g., city, stock, NCAA football team, car, restaurant, school, etc.). Additionally, a value being of a rich data type further includes established relationships with other types of data.

197. Free kick distance projecting device

Date: 2020-05-19 | ID: 10653936

Abstract: A display device for displaying a marking in the form of a distance to be kept between game equipment, in particular a football, and a participant on a playing field of a sports facility, includes a display device for projecting light beams representing the marking onto the playing field. The projected light beams display the distance to be kept, and can be projected at least in sections in the shape of a circle, for example at a distance of 9.15 m, around the game equipment on the playing field. The display device is jointly movable with a transport device that is movable above the sports facility.

198. Method, system, and computer program product for interactive sports game

Date: 2020-05-26 | ID: 10665061

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The

game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

199. Football sensing

Date: 2020-06-02 | ID: 10668333

Abstract: An automated objective American-football evaluation system may include an American-style football, at least one sensor carried by the football, and electronics. The electronics arranged to: (a) receive strings of sensor signals from the at least one sensor, wherein the characteristic of the throw of the football determined by the electronics; and (b) output throw quality. The throw quality is based upon a combination of at least two throw characteristic determined based upon the received string of sensor signals associated with a throw of the football. The at least two throw characteristics are selected from a group of throw characteristics consisting of: velocity; spin rate; time-of-flight; angle of attack; release angle; cone angle; nutation angle; spiral efficiency; and spiral decay.

200. Footwear for playing football

Date: 2020-06-09 | ID: 10674784

Abstract: A football shoe or boot including a sole (12), an upper (14) and a tongue (16), wherein the upper includes a flap (22) that overlies the tongue and at its lateral edges (33) is separated from side portions (15) of the upper by respective slits (25) open at their rear ends (26) and closed at their forward ends (27). The flap has an upper surface (23) that includes a ball control region (30). In one aspect the ball control region extends rearwardly from a foremost extremity located rearwardly of the forward ends of said slits. In another aspect, the slits are provided with lacing (60) whereby, when the shoe or boot is being worn, the relative positions of said lateral edges and the opposed side portions of the upper may be controlled.

201. Reverse deadlift apparatus

Date: 2018-06-26 | ID: 10004934

Abstract: The embodiments herein relate to an exercise machine for training the muscles of the whole body while specifically targeting the muscles of the legs and back. Specifically, the embodiments herein relate to a Reverse Deadlift Apparatus which allows a trainee to mimic a barbell type deadlift exercise in a safer and more productive fashion. An additional benefit is that the Reverse Deadlift Apparatus encourages a lifter to use proper technique by requiring them to use more of their legs and less of their lower back during the lift.

The result of using the Reverse Deadlift Apparatus on a regular basis is that a lifter will increase the strength and power of the muscles of the whole body and specifically will make improvements in the lower body. The added strength and power, along with optimized Deadlifting form, will help a lifter improve their performance in the actual barbell deadlift itself and in any sports requiring a strength or power component (e.g. Football, Baseball, Martial Arts, Wrestling, Powerlifting, Olympic Lifting, Tennis, etc.).

202. Information-presentation structure with impact-sensitive color changing incorporated into football or baseball/softball field

Date: 2018-07-03 | ID: 10010751

Abstract: A variable-color region (106) of a football-playing or baseball/softball-playing structure of an information-presentation structure extends to an exposed surface (102) at a surface zone (112) and normally appears along it as a principal color. An impact-dependent portion (138) of the variable-color region responds to an object (104) impacting the zone at an object-contact area (116) by temporarily appearing along a closely matching print area (118) of the zone as changed color materially different from the principal color. For football, the zone typically adjoins an end or side line (1446 or 1448) to help determine whether the object, typically a person's shoe, impacted the surface in or out. For baseball/softball, the zone typically adjoins a foul line (1506) to help determine whether the object, a baseball/softball, impacted the surface fair or foul.

203. Protective headgear and shoulder pad apparatus and methods

Date: 2018-07-10 | ID: 10016006

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

204. Open palm hand covers and uses of said covers

Date: 2018-07-10 | ID: 10016671

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partial hand covers and the use of said covers, intended to increase the overall performance in sports activities. More specifically,

the present invention offers strategic openings in select areas of the palm, creating substantial and significant advantages for the user, in playing the sports of football, golf and basketball.

205. Adjustable shoulder pads

Date: 2018-08-21 | ID: 10052547

Abstract: Shoulder pads for a player playing a contact sport, such as hockey, lacrosse or football, are provided. The shoulder pads comprise a front member, a back member, left and right shoulder arches, left and right shoulder protectors, and an adjustment system allowing the player to adjust a fit of the shoulder pads. The adjustment system may allow the player to adjust various components of the shoulder pads, including the front member, the back member, and the left and right shoulder protectors, in various directions.

206. Non-collision football and data tracking system

Date: 2018-08-28 | ID: 10058761

Abstract: The invention provides a system for playing a non-collision sport. The system comprises one or more hand devices, a jersey, shoulder pads optionally, and data collection and transfer devices. A server is part of the system and has at least one algorithm that manipulates and interprets the collected data. A data management system is connected in real-time to monitor play of the game and record and analyze player progress during game play.

207. Method for manufacturing an upper for a shoe

Date: 2018-08-28 | ID: 10059071

Abstract: Methods for manufacturing an upper for a shoe, in particular a football shoe, are described. A base layer for an upper is provided. At least one profile element, which comprises a rubber material, is connected to the outer face of the base layer. The profile element is connected to the outer face of the base layer without using a seam by means of hot pressing.

208. Sport gloves

Date: 2018-09-04 | ID: 10065101

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves intended to increase the overall performance in sports activities including but limited to football and golf. Primarily because of its unique finger configurations, and/or grip enhancers, and/or hand protective properties, the present invention makes a glove more operable in various sports activities.

209. Sports video display

Date: 2018-10-02 | ID: 10089550

Abstract: A system and method of producing and superimposing information graphics that relate to a sporting event. The information graphics may be superimposed on the playing surface during an athletic competition, a racetrack during a motorsports race, and the like. The information graphics may comprise a superimposed first down line that corresponds to a football team's colors. The information graphics may comprise a superimposed perimeter that borders the playing surface and corresponds to a team's colors. Additional embodiments include an information display graphic that quickly provide critical information to viewers.

210. Energy absorbing football helmet

Date: 2018-10-16 | ID: 10098402

Abstract: A football helmet including a one-piece outer shell defining an exterior and an interior. The shell includes a plurality of slots penetrating at least partially through the shell from the exterior to the interior of the shell. Each slot may be disposed adjacent to at least one other slot and each pair of adjacent slots defines an energy absorbing beam portion between the adjacent slots. Each beam portion is configured to deform and absorb energy when the exterior of the shell is impacted from a normal direction.

211. Football helmet with faceguard having raised eyebrow areas

Date: 2018-10-16 | ID: 10098406

Abstract: A football helmet comprising a rigid plastic shell adapted to cover the head of a wearer and a faceguard in the form of a cage of metal bars and removably attached to the shell. The faceguard includes an upper portion including an uppermost bar having a center bar part and a pair of side bar parts, and a horizontal bar below the center bar part and connected to the center bar part by a vertical bar, the uppermost bar and horizontal bar defining a gap between them which extends the entire length of the horizontal bar. The faceguard has a pair of raised eyebrow areas, each raised eyebrow area consisting of one of the pair of side bar parts bent upwardly with respect to the center bar part, in the uppermost bar being positioned on either side of the front portion of the shell and above the lower edge of the front portion of the shell.

212. Systems and methods for monitoring a physiological parameter of persons engaged in physical activity

Date: 2018-10-23 | ID: 10105076

Abstract: The present disclosure provides system and method for monitoring of at least one physiological parameter of a person engaged in a physical activity, for example, an impact received by a player engaged in

a contact sport such as football. The system includes a monitoring unit that actively monitors the physiological parameter of the person, wherein the monitoring unit generates an alert event when the monitored physiological parameter exceeds a threshold of the parameter. The monitoring unit determines whether the parameter exceeds an over-exposure threshold, wherein said threshold is based upon both a single incidence or cumulative incidences.

213. Computer-implemented methods and systems enabling fan participation in calling plays at sporting and other events

Date: 2018-10-30 | ID: 10112100

Abstract: Systems and methods are disclosed for determining a score for a user of a gaming platform such that the score reflects the user's success rate in calling plays in a sporting event. A computing device receives a user profile including a coach score and initiates a sequence of states, which include a poll creation state, a first notification state, a coach pick state, a fan voting state, a second notification state, and a play in action state. The computing device calculates a field score associated with the real-time play based on an on-field result. The computing device updates a coach score and outputs content to the registered user computing device related to the coach score. The computerized method and system is not limited to football, and may also be applied to other live events such as soccer, baseball, golf, hockey, or basketball.

214. Football tackling training sled

Date: 2018-11-13 | ID: 10124228

Abstract: The football tackling training sled is a device that is used to train football players how to tackle during a football practice. The football tackling training sled is further defined with a backbone support that is attached to a base member via a spring-loaded counter hinge. The backbone support is encapsulated with a padding so as to be impacted via a user. The backbone support rests at an obtuse angle with respect to the base member. The backbone support includes a track, which interfaces with a floating t-bar. The user impacts the backbone support with a lateral force while the user drives the floating t-bar upwardly and along the track.

215. Sports helmet

Date: 2018-11-27 | ID: 10136692

Abstract: The present invention provides a protective sports helmet for a wearer engaged in a contact sport, such as football. The helmet includes a shell having a front region, a rear region, two side regions, and an ear flap depending from a side region. A jaw flap extends forwardly from each ear flap, wherein the jaw flap overlies an extent of a mandible of the wearer. The shell also includes a raised central band that extends

from the front region across the crown to the rear region. The central band has lower side portions that extend from the rear region towards the side region of the shell and terminate proximate an ear opening in the shell. The central band has a width defined by a pair of opposed sidewalls that extend transversely from an outer surface of the shell. The shell also includes a first plurality of vent openings aligned along a first side of the raised central band and a second plurality of vent openings aligned along a second side of the band.

216. Protective sports helmet

Date: 2018-12-04 | ID: 10143257

Abstract: A football helmet includes a plastic shell with side regions having an ear flap with a face guard connector, an ear opening, a slot, and a snap connector. The helmet also includes an internal padding assembly removably connected to the plastic shell and including a jaw pad with a force attenuating layer. When the helmet is worn, a front edge of the jaw pad is positioned both in front of a coronal plane and below a basic plane of a head of the helmet wearer. A chin strap assembly releasably secures the helmet to the wearer and includes a lower flexible strap extending outwardly from each side of a central protective member. When the helmet is worn, an extent of the lower flexible strap is received by the slot when said strap is affixed to the snap connector. The shell also includes a raised central band integrally formed as part of the shell and extending across the crown region to the rear region. An arrangement of elongated vent openings flank the raised central band.

217. Exercise ring for improving strength and flexibility of a body part

Date: 2018-12-04 | ID: 10143883

Abstract: An apparatus and method may exercise muscles of a body part, especially the neck, waist, torso, legs, and glutes from any angle with variable resistance while taking up minimal floor space. The apparatus may improve the ability of athletes, including football players and wrestlers, to better prepare for contact from any angle while engaged in their sport. The apparatus may include a ring having a guide track therein. Another inner ring may also be provided in different sizes and shapes to accommodate a variety of users. A car may be connected to a source of resistance ride freely along the guide track. The source of resistance may be other gym equipment including a bungee cord, a cable cross over machine, springs, and the like. As the user freely exercises by moving the body part, the car may adapt to the user's position to facilitate a full range of motion.

218. Sport gloves

Date: 2018-12-04 | ID: 10143909

Abstract: According to the various features characteristics and embodiments of the present invention which

will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves intended to increase the overall performance in sports activities including but limited to football and golf. Primarily because of its unique finger configurations, and/or grip enhancers, and/or hand protective properties, the present invention makes a glove more operable in various sports activities.

219. Recreational device with rotor assembly

Date: 2018-12-11 | ID: 10150014

Abstract: Recreational footballs with rotor assemblies are provided herein. An example football includes a plurality of struts forming a prolate spheroid frame; and one or more rotor assemblies each having a plurality of blades, the one or more rotor assemblies being disposed within the prolate spheroid frame, the one or more rotor assemblies changing at least one aerodynamic aspect of flight of the recreational device when air passes through the prolate spheroid frame and rotates the plurality of blades of the one or more rotor assemblies.

220. System and method for recording and training athletes from multiple points of view

Date: 2018-12-18 | ID: 10158826

Abstract: A system and method for recording and training athletes uses multiple points of view For example, a new football training video in which a stationary camera (75 high) replaces the player (QB). The smooth (not jerky GoPro) easy to see video provides an unobstructed POV from the sightline of the QB (CorneaCAMCC) during the execution of live play. For confirmation of visual fields and analyzing the intentions of the defensive team, there are two other cameras videoing the same play. The user will have the capability to view the play from either of the two other angles in real time, to better understand, interpret and confirm what he thinks he sees at the CorneaCAM POV. All three POV's have freeze frame and slow motion capability.

221. Rotatable goal posts

Date: 2018-12-25 | ID: 10159881

Abstract: Rotatable and hinged goal posts are operably rotatable so that the goal post may rotated to a first position with the uprights being disposed toward a playing field such as for use when playing football, and to second position where the uprights being disposed away from the playing field such as for use when playing soccer. In addition, the rotatable and hinged goal posts are operably pivotable from a raised orientation and a lowered orientation, and vice versa.

222. Tubular projectile device

Date: 2019-01-22 | ID: 10183199

Abstract: Tubular projectile devices are disclosed herein. An exemplary tubular projectile device includes a spheroid frame having a long axis and a short axis. Further, the exemplary tubular projectile device includes a tubular medial section coupled with the spheroid frame; a first bicone comprising an exterior first cone congruent with an interior first cone, the first bicone being terminal along the long axis of the spheroid frame and coupled with the spheroid frame; and a second bicone comprising an exterior second cone congruent with an interior second cone, the second bicone being terminal along the long axis of the spheroid frame and coupled with the spheroid frame. The exemplary tubular projectile device may be a football.

223. Pallet threading apparatus

Date: 2019-01-22 | ID: 10183768

Abstract: A pallet threading apparatus including a directional handle; a flexible rod having a first end and a second end; a football shaped head member having a top portion and bottom portion, the top portion including a longitudinal slot; the directional handle is attached to the first end and the football shaped head member is attached to the second end; a cleat element positioned in the longitudinal slot, the cleat element including a pair of side walls having a plurality of oppositely opposed teeth for retaining a section of strapping material.

224. Method and system for determining ball positions and first downs in a football game

Date: 2019-01-29 | ID: 10188933

Abstract: A method and system for use in the game of football to determine ball placement and position, as well as first down demarcations, is described, with various embodiments configured to track the location of a football to determine its position on the field and to determine and display the first down demarcation on the field. Certain embodiments employ software to assist in performing placement determinations, distance determinations, track movement of the ball, first down markers, as well as light emitting modules along a track that extends parallel to the field.

225. Football helmet having improved impact absorption

Date: 2019-02-12 | ID: 10201743

Abstract: A football helmet is disclosed that includes a shell constructed of fiber reinforced epoxy resin, a liner made from expanded polypropylene, an impact absorbing layer situated between the liner and the shell, and a face guard. The impact absorbing layer is constructed from either expanded polypropylene or a viscoelastic polymer encased in a suitable thin yet resilient and elastic membrane. An optional impact absorbing band is also shown disposed around the inner periphery of the liner and encircling the player's head. The impact

absorbing band serves to reduce impact forces occurring from side helmet impact with objects or players.

226. Automobile rooftop mount

Date: 2019-02-12 | ID: 10202082

Abstract: The present disclosure teaches a device and method of vertically mounting a selected item on the roof of a automobile. The item may be put in a horizontal position when entering a garage or tunnel. The item may be a Christmas tree, a menorah, an oversized football helmet, ball, or anything else that can be positioned on a pole.

227. Detection of traumatic brain injury

Date: 2019-02-12 | ID: 10202649

Abstract: The present invention provides minimally invasive methods of detecting, diagnosing, and assessing neuronal damage associated with traumatic brain injury (TBI) or chronic traumatic encephalopathy (CTE). Specific species of microRNAs (miRNA), small, noncoding RNA molecules that play gene regulatory functions, are correlated with cellular damage and oxidative stress following TBI or CTE, allowing for rapid, minimally-invasive diagnosis and assessment of brain injury. The early identification and longitudinal assessment of neuronal damage in subjects suffering from or at risk of suffering from a TBI (e.g., football players, boxers, military personnel, fall victims) will improve clinical outcomes by guiding critical medical and behavioral decision making.

228. Casino wagering game with player selected conditions

Date: 2019-02-12 | ID: 10204470

Abstract: A method, apparatus, and computer readable storage medium to implement a wagering method using at least one electronic random number generator which simulates dice. The method can simulate a game of football which is based purely on player decisions and random outcomes of the random number generator. Different sequences of the method can be initiated based on outcomes of the random number generator.

229. American-style football including electronics

Date: 2019-03-05 | ID: 10220264

Abstract: An American style football including an inflatable prolate spheroidal shaped bladder, a cover assembly, a lacing and an electronic circuit. The bladder includes a valve assembly and a pocket that are symmetrically spaced about a longitudinal plane. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder. One of the first and fourth cover panels extending

over the valve assembly and the other of the first and fourth cover panels extending over the pocket. The lacing extends along the longitudinal plane and coupled to the first and fourth cover panels. The electronic circuit is retained by the pocket. The electronic circuit includes at least one sensor and the electronic circuit being configured to produce a signal to enable at least one characteristic of the football to be monitored during use.

230. Protective shoulder pads with release mechanism

Date: 2019-03-05 | ID: 10220291

Abstract: Protective shoulder pads to be worn by an individual engaged in a contact sport, such as football, lacrosse or hockey, are provided. The shoulder pads protect an individual wearing the protective shoulder pads against impact to the superior, anterior, posterior and/or lateral regions of the shoulder and upper arm regions. The shoulder pads include a release mechanism that releasably couples left and right arch members of the shoulder pads and allows for removal of the shoulder pads from the individual while he or she is maintained in the supine position, thus decreasing the risk of further injuring the individual wearing the protective shoulder pads.

231. Refrigerator cover

Date: 2019-03-12 | ID: 10228181

Abstract: Some implementations can include a refrigerator cover having a body portion with a first side, a second side and a top. The first side, second side and top each having generally flat interior surfaces defining an interior space of the cover and each having generally rounded exterior surfaces formed so as to generally resemble a football helmet. The cover can also include a front door attached to the body portion via one or more rotational members, the front door having a generally flat rear surface adjacent a front opening of the body portion when the front door is in a first position, the front door having a protruding member extending from a front surface, where the protruding member is formed generally in a shape of a football helmet face guard.

232. Lens protection systems

Date: 2019-03-12 | ID: 10228494

Abstract: The present disclosure features lens protection systems that comprise multi-layer film laminates that include an optically clear protective film, which remains on the lens during use and carrier layers that are used to assist the user with applying the protective film to the lens. These systems are suitable for use with a wide variety of eyewear, including but not limited to ski goggles, tactical goggles, diving goggles, protective eyewear such as safety glasses, sun glasses, helmet visors (e.g., for football, hockey, or motorcycle

helmets), and paintball masks.

233. American-style football including electronics

Date: 2019-03-26 | ID: 10238922

Abstract: An American style football including an inflatable prolate spheroidal shaped bladder, a lining positioned over the bladder, a cover assembly, a lacing, and an electronic circuit positioned between the lining and the cover assembly and generally aligned with the lacing. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder and the lining. The lacing is coupled to the first and fourth cover panels. The electronic circuit includes at least one sensor and the electronic circuit is configured to produce a signal to enable at least one characteristic of the football to be monitored during use.

234. Impact absorption padding for contact sports helmets

Date: 2019-03-26 | ID: 10238950

Abstract: There is disclosed an improved impact absorption padding for a contact sports helmet, for contact sports such as football, hockey and lacrosse, which incorporates a plurality of air pockets formed from a resiliently flexible material, such as plastic or rubber. At least some of the air pockets enclose a coil or spring. The coil or spring is also resiliently flexible over a wide range of temperatures, and oriented to compress in the general direction of impact to absorb a substantial portion of the energy before it is transferred to the head of the player. The coil or spring is also sized and shaped to return the air pocket to a desired thickness and shape after an impact. The air pockets may be arranged to substantially cover the outside of a contact sports helmet shell as a layer of impact absorption padding. A second inner layer of impact absorption padding may also be provided inside the contact sports helmet shell.

235. Delivery system for targeted launching of sports projectile

Date: 2019-04-09 | ID: 10252139

Abstract: A sports projectile delivery system may control the operation of a launcher to cause an American football or other sports projectile to be delivered to a target location on a field. In some aspects, the system can track player movements on the field, e.g., through the use of a tracking device mounted on the player, enabling the ball etc. to be launched to a player in anticipation of where the player will go. The system may include additional customization and/or logging options, e.g., permitting a player to designate a body position (e.g., above the head or near the knees) for delivery of the ball, designate a speed or hang time for delivery, or provide player data and analytics to an online or otherwise connected database.

236. Protective headgear and shoulder pad apparatus and methods

Date: 2019-04-16 | ID: 10258097

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

237. Football helmet with cheek supports

Date: 2019-04-16 | ID: 10258098

Abstract: A football helmet has a shell made of polycarbonate or ABS plastic or thermoplastic composite material and two cheek supports, each removably connected to an earflap. Each cheek support comprises an outer brace, an inner plate removably connected to the outer brace by fasteners passing through through-going holes formed in the earflap, and a cheek pad attached to the inner plate. The outer brace has a lower edge having a contour shaped to follow a contour of the lower edge of the earflap without extending substantially beyond the lower edge of the earflap. The inner plate has a lower edge having a contour shaped to follow the contour of the lower edge of the earflap without extending substantially beyond the lower edge of the earflap and an extension extending from a body of the inner plate and beyond the front edge of the earflap. A cheek pad is removably attached to the inner plate and positioned to overlay the cheek of a wearer. The cheek supports improve retention of the helmet and provide protection to the cheek area against blows.

238. Football helmet with raised plateau

Date: 2019-04-16 | ID: 10258100

Abstract: A football helmet has a rigid plastic football helmet shell with a single raised plateau in the crown portion of the shell extending from the front portion, over the crown portion, toward the back portion. The raised plateau has a left border and a right border. The left border is composed of a plurality of segments and extends continuously from the front portion, over the crown portion, toward the back portion. The segments of the left border including at least a first segment and second segment, which meet to form an angle. A non-circular first ventilation hole through the shell has at least a first side, a second side, and a third side, and is positioned at the angle, such that the first side is adjacent to the first segment and the second side is

adjacent to the second segment. The first segment extends beyond the first ventilation hole by a first distance at least as long as the first side and the second segment extending beyond the first ventilation hole by a second distance at least as long as the second side.

239. Tackle indicating assembly

Date: 2019-04-16 | ID: 10258855

Abstract: A tackle indicating assembly for flag football players includes a belt that is configured to position around and couple to a waist of a user. Each of a plurality of straps has a terminus that is configured to selectively magnetically couple to the belt. The straps are configured to be grasped in a hand of a tackler so that each strap is positioned to separate from the belt to indicate a tackle of the user.

240. Football snapper

Date: 2019-04-23 | ID: 10265598

Abstract: A portable automatic football snapper may be built as a tube to launch football snaps while being lightweight and able to be carried by handle, shoulder-strap, or clipped onto another backpack. The snapper is small and can store a football within, and, when stood upright, may serve as a stand for a football placed on top to simulate an under center exchange. A stand built into a side of the bag extends to establish a base and ideal snap angle for shotgun snap use. Inside the snapper, a cup may be used to hold the football, may be pulled down and clipped into a pre-snap position, and upon release is pulled upwards, launching or snapping the ball in a spiral to the quarterback. The release may be manual, automatic based on a mechanical or electronic timer, or sound-activated or remote controlled allowing snap control by the quarterback.

241. Protective sports helmet

Date: 2019-04-30 | ID: 10271605

Abstract: A protective sports helmet that includes an energy attenuating faceguard connection system, which includes at least one connector that secures the faceguard to the helmet shell without a connection point in the shell's brow region. The sports helmet can be configured as a football helmet to be worn by a player and where the lack of a brow region connection point results in a gap or clearance between the faceguard and the shell that has a functional interplay with the connector upon an impact to the faceguard. The football helmet has a unique collection of helmet shell features that include an arrangement of a raised central band, lateral ridges, frontal vent openings and rear vent openings.

242. Heat providing football glove

Date: 2019-05-14 | ID: 10285462

Abstract: A heatable football glove that provides heat to a wearer's hand. The glove includes a body member that includes a pocket therein to accommodate a heating element of substantially the same size as the pocket such that the heating element after activation is introduced through an opening into the pocket where it is snugly received therein and conforms to the pocket in order to be retained therein substantially without movement during use of the glove. A covering member that is selectively movable between open and closed positions is provided for closing the opening and retaining the heating element in the pocket during use of the glove. An attachment member is associated with the covering member for releasably attaching or adhering the covering member to the glove to retain the heating element in the pocket during use.

243. Football helmet with shell section defined by a non-linear channel

Date: 2019-05-14 | ID: 10285466

Abstract: A football helmet comprising a one-piece shell and an energy absorbing layer includes a crown portion, a front portion, a left side portion, a right side portion, and a rear portion. The shell has a non-linear channel spaced in its entirety from an edge of the shell that partially surrounds and defines a shell section within the front portion such that the shell section is moveable relative to the remainder of the shell upon the shell section receiving an impact energy to dampen the impact energy.

244. Modular helmet apparatus and system

Date: 2019-06-04 | ID: 10306944

Abstract: Embodiments of the present disclosure provide for a modular helmet apparatus and system comprised of a removable outer shell disposed on an inner frame. The disclosed football helmet provides for enhanced energy diffusion through the use of one or more energy diffusion areas disposed on an outer shell of the helmet, the one or more energy diffusion areas being configured to align with the energy diffusion zones of the frame. Embodiments of the present disclosure enables a user to quickly and easily replace or swap the outer shell of the helmet with a second or replacement shell by selectively coupling the desired outer shell with the frame.

245. Football training device and method

Date: 2019-06-04 | ID: 10307655

Abstract: A football training device for replicating a defensive rush includes a base frame, a plurality of obstacles extending upward from the base frame, and one or more wheels supporting the base frame. A method of training an offensive football player using the device includes positioning an offensive football player being trained on front of the training device, initiating a drill where the offensive football player carries

out a conventional football play, and while the offensive football player carries out the conventional football play, moving the training device, relative to the offensive football player, such that the obstacles simulate a defensive rush toward the offensive player, thereby creating a visual and physical barrier to the completion of the conventional football play.

246. Football receiving and throwing machine

Date: 2019-06-18 | ID: 10322329

Abstract: A machine and method for receiving and launching an oval football. The machine includes a football catch area, a motorized belt to orient the football and motorized wheels to launch the football. The user catching the football throws it back to the machine. The machine automatically orients the football and launches it back to the user catching the football. The machine provides the user a consistent timing pause between receiving the football and launching of the football.

247. Tournament based on poker-like games based on live sporting events

Date: 2019-07-09 | ID: 10347085

Abstract: A tournament played over a network consisting of rounds (hands) of a poker-like game based on the action in one or more live sporting events. The number of hands played, and the timing of those hands, are the same for every player in the tournament, and are independent of the number of players in the tournament. The number of players in the tournament can be arbitrarily large or small. The prize structure can also be independent of the number of players, and announced in advance. The tournament is preferably based on a collection of closely associated betting events, like the drives in a single football game; or a collection of closely associated sporting events. The poker-like games played in each round of the tournament utilize chips where the winners of the tournament are the players with the largest chip counts at the end of the tournament.

248. Football helmet

Date: 2019-07-16 | ID: 10349696

Abstract: A helmet having an inner shell with a first projection and a second projection, an outer shell, and at least one shock absorption system. Each shock absorption system comprises a first recess disposed in the first projection, a second recess disposed in the second projection, and a leaf spring having a first leg, a second leg, and a curved middle portion. The first leg is received by the first recess and the second leg is received by the second recess. The leaf spring is adapted to flex and extend into the first and second recesses in response to an external impact to the helmet. The inner shell and outer shell may be composed of a synthetic fiber. The shock absorption system may also include a compression spring disposed between a

flange of the leaf spring and the second projection of the inner shell.

249. Articles of sports apparel with support elements

Date: 2019-07-23 | ID: 10357067

Abstract: Articles of sports apparel may include elongate support elements. Particular examples provided are swimsuits and other sports apparel such as sports apparel for rugby football. An Article of sports apparel may include at least one base portion adapted to be arranged proximate a lower back of a user when worn, and at least three elongate support elements. The at least three elongate support elements may be arranged at the base portion such as to extend outwardly from a region at least partially encompassing the lower back of the user when worn.

250. Impact attenuation system for a protective helmet

Date: 2019-07-23 | ID: 10357075

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member changes how a portion of the shell having the impact attenuation member responds to an impact force having a component applied substantially normal to the impact attenuation member as compared to how the left and right side portions respond to the impact force.

251. Padding assembly

Date: 2019-08-06 | ID: 10369452

Abstract: A padding assembly for a helmet includes a plurality of pads that is configured to couple to an external surface of the helmet, such as a football helmet. The pads are configured to absorb a force from an impact to the helmet when the helmet is positioned on a head of a user. The force of the impact to the head of the user is reduced.

252. Surface underlayment system with interlocking resilient assemblies of shock tiles

Date: 2019-08-06 | ID: 10369739

Abstract: A surface underlayment system and its method of manufacture that is sandwiched between an impact-receiving upper surface and a lower foundation. The energy absorbing system has subassemblies of interconnected modules that cooperate to absorb and distribute impact forces applied thereto. Each module has one or more frustoconical support structures. At least some of the frustoconical support structures have bases that underlie the upper impact-receiving surface such as a golf putting green, a football field, marine

decking, and senior living flooring.

253. Football helmet with raised plateau

Date: 2019-08-13 | ID: 10376011

Abstract: A football helmet has a rigid plastic football helmet shell with a raised plateau of the shell extending from the front portion, over the crown portion, toward the back portion. This raised plateau is the only raised plateau of the shell which begins in the front portion, extends over the crown portion, and ends in the back portion. The raised plateau has a left border and a right border. The left border is composed of a plurality of segments and extends continuously from the front portion, over the crown portion, toward the back portion. The segments of the left border including at least a first segment and second segment, which meet to form an angle. A non-circular first ventilation hole through the shell has at least a first side, a second side, and a third side, and is positioned at the angle, such that the first side is adjacent to the first segment and the second side is adjacent to the second segment. The first segment extends beyond the first ventilation hole by a first distance at least as long as the first side and the second segment extending beyond the first ventilation hole by a second distance at least as long as the second side.

254. System for digital yearbook

Date: 2019-08-13 | ID: 10380102

Abstract: A system and method for providing meeting services in a digital yearbook includes a server and a user device for presenting media content. User interfaces are provided to each user for specifying tendencies, skills and likes of each of the yearbook users and for specifying desired tendencies, desired skills and desired likes of another of the yearbook users who a yearbook user would like to meet. The desired tendencies, skills, and likes contrasts the tendencies, skills and likes of the yearbook users so as to find a friend with differences, thereby balancing and contrasting those of the yearbook user. For example, tendencies are introverted/extroverted, skills are math/science, and likes are music/football, etc.

255. Method, system, and computer program product for sports game

Date: 2019-08-27 | ID: 10395483

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their

wager.

256. Football sensing

Date: 2019-09-03 | ID: 10398945

Abstract: A football sensing system may include an American-style football extending along a longitudinal axis and having a maximum transverse dimension defining a transverse axis and at least one accelerometer. The football has a bladder and a cover about the bladder. The accelerometer is carried by the football between the bladder and the cover to sense acceleration along at least a first axis. The accelerometer is sized to sense a predetermined maximum value of acceleration in the first axis. The accelerometer is positioned within the football in a first position with the first axis of the accelerometer angled with respect to the longitudinal axis of the football. The accelerometer in the first position is capable of measuring acceleration values in a direction in line with or parallel to the longitudinal axis of the football that are greater than the predetermined maximum value of acceleration in the first axis.

257. Method, system, and computer program product for interactive sports game

Date: 2019-09-03 | ID: 10403094

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

258. System and methods providing sports event related media to internet-enabled devices synchronized with a live broadcast of the sports event

Date: 2019-09-24 | ID: 10425613

Abstract: An electronic device can be synchronized with a broadcast of a live sporting event to obtain supplemental sports data over a data network from a server storing data associated with the live sporting event. Supplemental sports data is obtained from the server for display on the electronic device following a triggering activity associated with the broadcast of the live sporting event. Supplemental sports data can be transmitted for rendering on a display associated with the electronic device. Supplemental sports data can include display of an instant replay video of a sports athlete combined with audio of a pre-recorded statement by the sports athlete associated with the instant replay video, an announcement of a score change for a

sporting event monitored by the electronic device, and a display of a football widget providing updates on football game status (e.g., possession, ball location, current score) monitored by the electronic device.

259. Modular football helmet apparatus and system

Date: 2019-10-01 | ID: 10426212

Abstract: Embodiments of the present disclosure provide for a modular helmet apparatus and system comprised of a removable outer shell disposed on an inner frame. The disclosed football helmet provides for enhanced energy diffusion through the use of one or more energy diffusion areas disposed on an outer shell of the helmet, the one or more energy diffusion areas being configured to align with the energy diffusion zones of the frame. Embodiments of the present disclosure enables a user to quickly and easily replace or swap the outer shell of the helmet with a second or replacement shell by selectively coupling the desired outer shell with the frame.

260. Game system and method utilizing outcomes of live events, including sporting events

Date: 2019-10-08 | ID: 10438449

Abstract: A bingo-like game system and method utilizing bingo-like game cards depicting a grid formed of a plurality of spaces identifying outcomes associated with a live event such as a football game. A game system comprises a series of unique game cards with each game card depicting a grid formed of a plurality of spaces wherein the spaces identify outcomes associated with a live sporting event. Real time outcomes associated with the live sporting event dictate which matching spaces on the unique game cards are marked automatically or manually. Pre-established patterns of marked spaces determine winners of the game. The system further generates game cards having similar odds of winning based on the arrangement of possible outcomes associated with the live event.

261. Football helmet with movable flexible section

Date: 2019-10-22 | ID: 10448691

Abstract: A protective helmet comprises a shell comprising a non-linear slit at least partially surrounding and defining a flexible section movable relative to the shell. The helmet further comprises an energy absorbing layer contacting an inner surface of the shell and an inner surface of the flexible section. Internal padding is operably coupled to the energy absorbing layer. The shell has a perimeter, and the non-linear slit does not extend to the perimeter of the shell. The flexible section moves relative to the shell upon the helmet receiving an impact energy to dampen the impact energy.

262. American-style football including electronics

Date: 2019-11-05 | ID: 10463921

Abstract: An American-style football having a major longitudinal dimension extending about a longitudinal axis and including an inflatable prolate spheroidal shaped bladder, a lining positioned about the bladder, a cover assembly, a lacing and a thin electronic tag. The cover assembly includes at least first, second, third and fourth cover panels collectively positioned over the bladder and the lining. The lacing extends along a longitudinal plane extending through the longitudinal axis and is coupled to the first and fourth cover panels. The tag is positioned between the lining and the cover assembly. The tag is covered by at least one of the first and fourth cover panels but not covered by the second and third cover panels. The tag is configured to enable at least one characteristic of the football to be monitored during use. In another example implementation, the tag is positioned between the lining and the bladder.

263. Football tackling practice assembly

Date: 2019-11-05 | ID: 10463938

Abstract: A football tackling practice assembly for learning a safe tackling method includes a pair of tubes, a crossbeam, and a dummy. Each tube comprises a plurality of nested sections so that the tube is selectively extensible. The crossbeam is coupled to a top of each tube and extends between the tubes. Each of a pair of bases is coupled to and extends perpendicularly from a bottom of a respective tube. The bases are configured to support the tubes perpendicularly to a surface. A first fastener is coupled to the crossbeam. A second fastener is coupled a helmet that is coupled to a head of the dummy. The second fastener is complementary to the first fastener and is positioned to reversibly couple to the first fastener to couple the dummy to the crossbeam so that the dummy is configured to be tackled by a user.

264. Sporting field measurement system

Date: 2019-11-05 | ID: 10466051

Abstract: A sporting field measurement system is disclosed wherein a user is prompted to select, on a mobile device, a field for marking from various sporting field types including, but not limited to football, baseball, softball, soccer, lacrosse, track, tennis, basketball, cricket, polo, rugby, Australian football, volleyball, and badminton. The Global National Satellite System (GNSS) or at least the global positioning system (GPS) is used to locate a user's device. An application displays, on a display, of the mobile device, the dimensions of the specified sporting field as an overlay on a map, generated by the positioning system and it will communicate with the GNSS or GPS of the device to allow the user to track his or her movement along a specified path of a proposed field. This will allow the user to place the appropriate markers and/or paint the field. Deviations from the path may be indicated on the display of the mobile device or by an audio indication generated by the mobile device.

265. Football helmet with movable shell segment

Date: 2019-11-12 | ID: 10470514

Abstract: A protective helmet comprises a shell having an inner surface and an outer surface, and a shell segment movable relative to the shell; an energy absorbing layer having an inner surface, and an outer surface which contacts the inner surface of the shell; and internal padding operably coupled to the inner surface of the energy absorbing layer. The shell has a perimeter and the shell segment is formed by at least one slot channel in the shell which does not extend to the perimeter of the shell. The shell segment moves relative to the shell upon the helmet receiving an impact force. The slot channel is generally U-shaped.

266. Football helmet with pressable front section

Date: 2019-11-12 | ID: 10470515

Abstract: A protective helmet comprises a shell made of plastic and having a raised central region oriented from a front of the shell towards a rear of the shell, a first vent opening adjacent to the raised central region on a left side of the raised central region, a second vent opening adjacent to the raised central region on a right side of the raised central region, a pressable front section created by a non-linear slit through the shell, which does not extend to an edge of the shell, ear holes formed in the shell; and an energy absorbing layer protected by the shell and having an outer surface.

267. Impact attenuation system for a protective helmet

Date: 2019-11-12 | ID: 10470516

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member changes how a portion of the shell having the impact attenuation member responds to an impact force having a component applied substantially normal to the impact attenuation member as compared to how the left and right side portions respond to the impact force.

268. Helmet for impact protection

Date: 2019-11-19 | ID: 10477909

Abstract: A helmet for protecting a head of a wearer, such as a hockey, lacrosse, football or other sports player. The helmet includes an outer shell and an inner padding disposed between the outer shell and the wearer's head when the helmet is worn. The inner padding includes a plurality of shock absorbers and an interconnector interconnecting the shock absorbers, each shock absorber being deformable in response to a rotational impact on the helmet such that an outer part of the shock absorber moves relative to an inner part

of the shock absorber in a direction tangential to an angular movement of the outer shell due to the rotational impact.

269. System and method for real-time personnel fatigue level monitoring

Date: 2019-11-19 | ID: 10478095

Abstract: The present invention relates to analyzing fatigue level of users by transmitting pressure data from user's shoes wirelessly for real-time monitoring. Athletes for in body-contact games such as football, are often suddenly forced out of games due to injuries as it is often difficult to ascertain the nature of the injury on the field. The present invention enables a coach to have an ability to monitor performance of the athletes as they play, thus help in determining current level of athlete's injury, and help in preventing career threatening and/or fatal injuries. Further, pressure sensors can be used to determine fatigue detection and can be verified by readings from knock sensor, accelerometer data, etc. Variations in all such sensors for a time slice t-seconds can be used as an indicator for fatigue.

270. Breakaway facemask system

Date: 2019-11-26 | ID: 10485285

Abstract: A breakaway facemask system for reducing injuries from a facemask penalty in American football includes a helmet that is worn during athletic activities. A cage is removably coupled to the helmet. The cage is positioned to cover to the opening thereby protecting a user's face from impact. A plurality of retainers is provided and each of the retainers is coupled to the helmet. Each of the retainers releasably engages the cage such that the cage is removably coupled to the helmet. The cage breaks away from the helmet when the cage is gripped thereby reducing the possibility of injury to the user.

271. Device and method for properly locating the YardLine numbers of a football field

Date: 2019-11-26 | ID: 10486053

Abstract: A template for properly determining the positions for the yardline numbers of an American-style football field includes a generally rectangular frame having an external perimeter and an internal opening defined by an internal perimeter. The shape of the internal opening, and the corresponding shape of the internal perimeter, is such that for each of the yardline numbers, i.e. 5, 4, 3, 2, 1, and 0, the internal perimeter defines a plurality of locations for abutting a corresponding plurality of outer edge portions of the yardline number. With the external perimeter appropriately aligned along one or more lines of the field, the frame can be used to properly locate any one of the six yardline numbers that are needed to properly locate all of the yardline numbers on an American-style football field. This frame reduces the number of templates needed to locate the yardline numbers of a football field, and also simplifies the process of properly locating the yardline

numbers.

272. Football helmet with recessed face guard mounting areas

Date: 2019-12-17 | ID: 10506841

Abstract: A protective football helmet is provided having a face guard mounting system with at least one pair of opposed recessed mounting regions that ensure a low-profile mounting arrangement for a face guard to the helmet. The recessed mounting regions are formed in both the inner and outer surfaces of the helmet shell along a frontal opening in the shell. As a result of the streamlined frontal appearance provided by the face guard mounting system, the width of the face guard closely corresponds to the width of the helmet at the recessed mounting regions.

273. Antler wall mount assembly

Date: 2020-01-07 | ID: 10525764

Abstract: An assembly for mounting deer antlers is provided, the assembly generally comprising an enclosure, the enclosure generally shaped like a game ball such as a football, and comprising a front portion and a rear portion, the enclosure being adapted to couple end portions of main beams of the antlers to an inside surface of the enclosure rear portion such that portions of the antlers extend through lateral holes, to an area outside the enclosure, the enclosure front and rear portions being removably coupled to one another.

274. Telescoping football holder

Date: 2020-01-14 | ID: 10532262

Abstract: A compact device for assisting place kicking a football is disclosed, including a module connecting telescoping legs and football tip telescoping holding arm, with the legs connecting the module for pivoting the legs from a ground engaging position to a transport position beneath and parallel to the arm.

275. Football helmet having three energy absorbing layers

Date: 2020-01-28 | ID: 10542788

Abstract: A football helmet is disclosed that includes a shell constructed of fiber reinforced epoxy resin, a thin resilient outer liner adjacent the inner shell surface, a thicker resilient middle liner and a thin resilient inner liner. The three liners are preferably fabricated from expanded polypropylene or suitable substitute having comparable resilient energy absorbing properties. The inner and outer liners are made from higher impact absorbing material than the impact absorbing material of the middle liner. The helmet also includes fitment pads, jaw pads, a face mask, and moisture absorbing cloth material.

276. Sports awareness vest

Date: 2020-02-04 | ID: 10549167

Abstract: A system, device, and method are provided herein for remotely trigger a light on an awareness article. In some embodiments, the awareness article is a vest used by football players where a plurality of awareness vests are in electronic communication with an electronic device. A coach can control activation of the light on each awareness vest such that, for example, a quarterback can throw a football to the person wearing the awareness vest with the activated light. Various other aspects of the system, device, and method are described herein, and other applications of the awareness vest can include other sports such as soccer and hockey, dog training such as hunting and schutzhund, and military training such as war games, target practice, and enemy identification.

277. System and method of penalty data compilation, analysis and report generation

Date: 2020-02-04 | ID: 10553124

Abstract: The present invention relates generally to a system and method for reviewing and evaluating performance. In particular, the present invention relates to a system, method, and computer program produce for reviewing and evaluating performances of an official or group of officials at an event or events. Even more specifically, according to embodiments of the present invention, the system and method can involve reviewing and evaluating an official or group of official's performance during a sporting event or events, such as a football game or games or a basketball game or games.

278. Protective headgear and shoulder pad apparatus and methods

Date: 2020-02-11 | ID: 10555575

Abstract: The invention includes a protective headpiece and components thereof and methods for their use. Preferred examples comprise a helmet component, a plurality of piers joining said helmet component to a shoulder pad component and an inner hat component permitting the wearer the ability to move the head from side to side and/or up and down within the helmet component without moving the helmet component. The helmet component may comprise a plurality of fluid-filled floating plates or floats on the inner surface thereof to cushion the head against impact during activities including, for example, football, race car driving, military activities and the like.

279. Oval football receiving and launching machine and method

Date: 2020-02-18 | ID: 10561905

Abstract: What is provided is a football catching and throwing machine and method that includes an inclined upwardly angled path. The machine includes a collector configured to receive a football thrown into it; a ball

translator configured to align the football and transport the football up the inclined path to a football accelerator that launches the football into the air; and a motor that operates the football accelerator.

280. Partial fingered gloves for football or golf play

Date: 2020-02-25 | ID: 10569154

Abstract: According to the various features characteristics and embodiments of the present invention which will become apparent as the description thereof proceeds, the present invention provides partially fingered gloves and the use of said gloves, intended to increase the overall performance in sports activities including but limited to football and golf. Because of its unique finger configurations, grip enhancers, and/or its hand protective properties, the present invention makes a glove now operable on a football quarterback's throwing hand and on golfers dominant hand, for example.

281. Method and system for playing a bowling game in combination with a game of football as a secondary game

Date: 2020-02-25 | ID: 10569157

Abstract: A method and system for playing a bowling game in combination with a football-type game is disclosed. The method and system comprising the steps of initiating a conventional bowling game, filling at least one bowling frame, evaluating a bowling score for at least one bowler, generating a football play result based on the bowling score, displaying a football position based on the football play result, continuing the bowling game and generating the football play result until a 10th frame of bowling is completed, determining a winning football team, and providing an award to the winning football team.

282. Supporting element for shoes

Date: 2020-03-03 | ID: 10575585

Abstract: Described are supporting elements for a shoe, in particular for soccer shoes or American football shoes, as well as a sole and a shoe with a supporting element. The supporting element includes a first bending stiffness for bendings from an initial unbent state up to an upper end of a threshold angle range, and a second bending stiffness for bendings beyond the upper end of the threshold angle range, wherein the second bending stiffness is greater than the first bending stiffness.

283. System and methods of objectively evaluating football player tackling performance

Date: 2020-03-03 | ID: 10576349

Abstract: A system is provided for evaluating football player tackling performance of learned skills in a competitive in-game setting. The system includes reviewing video footage of football games, and analyzing

each tackle opportunity with clear objectives for the player with the tackling opportunity to satisfy to achieve a successful result. The system also includes a visual tool that provides clear context for analysis of each tackle opportunity. Methods of evaluation are also provided.

284. Rich data types

Date: 2020-03-03 | ID: 10579724

Abstract: The present disclosure is directed to systems and methods for implementing rich data types in a spreadsheet application. Generally, a value being of a rich data type is as a type of value that has context and established relationships with other types of data. In particular, a rich data type is a data value having associated context, which may be units (e.g., inches, miles, meters, kilograms, seconds, joules, hertz, Fahrenheit, etc.) or other information about the data's type (e.g., city, stock, NCAA football team, car, restaurant, school, etc.). Additionally, a value being of a rich data type further includes established relationships with other types of data.

285. Football helmet with impact attenuation system

Date: 2020-03-10 | ID: 10582737

Abstract: A protective football helmet is provided having a one-piece molded shell with an impact attenuation system. This system includes an impact attenuation member formed in an extent of the front shell portion by removing material from the front portion. The impact attenuation member is purposely engineered to change how the front portion responds to an impact force applied substantially normal to the front portion as compared to how other portions of the shell respond to that impact force. In one version, the impact attenuation member is a cantilevered segment formed in the front portion of the shell.

286. Method and system for motion data processing

Date: 2020-03-10 | ID: 10582884

Abstract: A method for motion data processing includes: sensing a plurality of motion data of football player by a magnetic football and magnetic sensors; according to the motion data, analyzing the player's motion trajectory by a processing chip, and identifying whether the player's kicking motion is sliding tackle, smashing or dribbling.

287. Method of making textured sports ball

Date: 2020-03-10 | ID: 10583332

Abstract: A sports ball (10), such as a football (12), has outer panels (14) of leather. The outer panels (14) have embossed pebbles (16) to enhance grip. Each outer panel (14) is formed by embossing the pebbles

(16) on a segment (54) forming one or more of the outer panels (14) after the segment (54) has been cut from the unembossed full hide or half hide from which it comes. This provides great advantages in flexibility and consistency of manufacturing in addition to improved performance such as grip and aerodynamics.

288. System and method for providing an alert on delivering digital content

Date: 2020-03-10 | ID: 10587933

Abstract: The present invention discloses a system and method for providing an alert on delivering a digital content such as when an interesting digital content is imminent, for example, the beginning of a play during a football game, to direct the focus of one or more viewers towards the digital content. The present invention is further configured to embed a commercial message in conjunction with the alert on directing the focus of the viewers. The system is adapted to activate the alert either manually or automatically. Further, the system is optionally implemented with an artificial intelligence (AI) system, which is trained using deep learning to recognize the appropriate time to automatically trigger the alert/commercial message sequence. The AI system could be trained by monitoring the manual control of alert activation.

289. Lewis helmet

Date: 2020-03-24 | ID: 10595577

Abstract: A protective football helmet is provided having a two-piece mold shell diminution shell system.The helmet is comprised of a nine-piece part outer shell, a solid rim outer shell to deflect direct impact from the nine piece part outer shell, an inner liner helmet, compression springs as shocks, and a spin dial to control and restrict the movement of the compression springs and nine piece part outer shell. The nine piece part is a special designed helmet to absorb impact on contact from the crown of the helmet, all four sides and all angles in between to protect the players' head from direct contact at any angle. The outer shell diminution system is piece parted to absorb the impact energy individually by the outer shell protection. Each outer shell piece parted section takes on the impact of energy with an oval shape to deflect and transfer contact impact energy from one piece part to another, thereby dispersing the energy throughout the outer shell of the helmet.

290. Novelty football audio apparatus

Date: 2020-03-24 | ID: 10596420

Abstract: A novelty football audio apparatus for playing fight songs to show school pride includes a football body having a football-shaped skin forming an inner cavity. The skin has an exterior, an interior, and an access aperture extending through to the inner cavity. An access panel is coupled to the football body to cover and alternatively uncover the access aperture. A set of imitation laces is coupled to the football body and is configured to represent laces from a real football. An electronics housing is coupled to the interior of

the skin within the inner cavity beneath the access aperture. A tone generator coupled within the electronics housing. A speaker is coupled within the skin above the electronics housing and is in operational communication with the tone generator. A power button is coupled within the skin above the electronics housing and is in operational communication with the tone generator.

291. Drive shaft

Date: 2020-03-24 | ID: 10598210

Abstract: A drive shaft is formed by welding two spline shaft heads to a hollow middle section of tubing. The spline shaft head includes teeth which are crowned to permit an angular offset of the drive shaft relative to cylindrical splines of connectors, such that the end faces of the teeth define a barrel shape. The teeth of the spline shaft head include a side face curvature, defining a football-shaped tooth cross-section. Torque is rotationally transmitted across a permitted angular offset of the drive shaft relative to cylindrically arranged linear splines of drive and driven connectors (i.e., relative to the engine output axis of rotation and the differential input axis of rotation), thereby avoiding the use of prior art universal joints.

292. Anti-concussion collar assembly and method of use

Date: 2020-03-31 | ID: 10602793

Abstract: An anti-concussion helmet attachment collar assembly includes a cowl body attached to a curved helmet attachment ring segment at its upper end, and to a cowl support ring at its lower end. A circular rolling element bearing is interposed between the bottom of the cowl support ring and the interior shoulder of an underlying central ring, facilitating rotation of the cowl support ring with respect to the central ring. A modified helmet incorporates a flange with keyhole openings coupleable with standoff rivets on the helmet attachment ring segment. A base attached to equipment, such as football shoulder pads, is configured to selectively couple with the central ring during use.

293. Kicking tee for football and rugby

Date: 2020-04-07 | ID: 10610758

Abstract: The invention discloses a kicking tee for American football or rugby that maximizes the possible forward lean of the football which extends the segment of impact through the ball while also exposing the entire ball from base to tip to the view of the kicker, allowing the kicker to more easily aim at the ball's sweet spot. The results achieved by use of the present invention are greater distance and height, velocity and hangtime, as well as greater control of the trajectory of the ball over that of the prior art. The invention also improves on the prior art by allowing a greater overall range of ball placement, resulting in the kicker having greater control over where the ball will travel on the field of play.

294. System and method for enhancing fan experience when attending a sporting event such as a football game or a music concert at a stadium

Date: 2020-04-21 | ID: 10625656

Abstract: System for enhancing fan experience comprises a stadium having a field area, a pathway extending along at least a portion of the field area, and a vehicle adapted to move along the pathway, the vehicle being adapted to transport sports fans situated within the vehicle simultaneously along the pathway during a sports event or concert go-ers situated within the vehicle simultaneously along the pathway during a music concert, to provide a view to the sports fans riding in the vehicle from amongst and/or in close proximity to the players in a sideline area on the field area during a sports event, and to provide a view to concert go-ers riding in the vehicle from close proximity to a stage located on the field area and the performers on the stage during a music concert.

295. Simulated American football game

Date: 2020-04-28 | ID: 10632364

Abstract: A simulated American football game, with a particular gaming surface, and methods of play are described. The gaming surface may include an elongate I shaped field that may include a simulated field region bounded by two opposing simulated play regions in a same plane. The simulated field region may simulate a 100 yard American football field and may include LED lighting to track a line of scrimmage and to track a first down yard marker target. The two opposing simulated play regions may provide for a diversity and plurality of various play outcomes that may dictate certain gameplay results when a slider comes to rest mostly over a given target or region. The slider may be slid from one opposing simulated play region, across the simulated field region to the other opposing simulated play region. In some embodiments, defensive blocking obstacles may be used to intentionally increase gameplay difficulty.

296. Notifications for rich data types

Date: 2020-05-05 | ID: 10642930

Abstract: The present disclosure is directed to systems and methods for implementing notifications for rich data types in a spreadsheet application. Generally, a value being of a rich data type is as a type of value that has context and established relationships with other types of data. In particular, a rich data type is a data value having associated context, which may be units (e.g., inches, miles, meters, kilograms, seconds, joules, hertz, Fahrenheit, etc.) or other information about the data's type (e.g., city, stock, NCAA football team, car, restaurant, school, etc.). Additionally, a value being of a rich data type further includes established relationships with other types of data.

297. Free kick distance projecting device

Date: 2020-05-19 | ID: 10653936

Abstract: A display device for displaying a marking in the form of a distance to be kept between game equipment, in particular a football, and a participant on a playing field of a sports facility, includes a display device for projecting light beams representing the marking onto the playing field. The projected light beams display the distance to be kept, and can be projected at least in sections in the shape of a circle, for example at a distance of 9.15 m, around the game equipment on the playing field. The display device is jointly movable with a transport device that is movable above the sports facility.

298. Method, system, and computer program product for interactive sports game

Date: 2020-05-26 | ID: 10665061

Abstract: A computer implemented game involving analytics and real time data analysis. The game can allow players to predict and wager on the types of plays that have yet to occur, for example, in a football game. The game may utilize an algorithm that compares situational data in a game to stored data regarding similar situations in past games. The game can then provide a likelihood that a certain type of play can be performed, which may be interpreted as odds of a certain type of play. Users can then utilize this information to predict and wager on the upcoming play. Depending on the results of the play, users may win or lose their wager.

299. Football sensing

Date: 2020-06-02 | ID: 10668333

Abstract: An automated objective American-football evaluation system may include an American-style football, at least one sensor carried by the football, and electronics. The electronics arranged to: (a) receive strings of sensor signals from the at least one sensor, wherein the characteristic of the throw of the football determined by the electronics; and (b) output throw quality. The throw quality is based upon a combination of at least two throw characteristic determined based upon the received string of sensor signals associated with a throw of the football. The at least two throw characteristics are selected from a group of throw characteristics consisting of: velocity; spin rate; time-of-flight; angle of attack; release angle; cone angle; nutation angle; spiral efficiency; and spiral decay.

300. Footwear for playing football

Date: 2020-06-09 | ID: 10674784

Abstract: A football shoe or boot including a sole (12), an upper (14) and a tongue (16), wherein the upper includes a flap (22) that overlies the tongue and at its lateral edges (33) is separated from side portions (15)

of the upper by respective slits (25) open at their rear ends (26) and closed at their forward ends (27). The flap has an upper surface (23) that includes a ball control region (30). In one aspect the ball control region extends rearwardly from a foremost extremity located rearwardly of the forward ends of said slits. In another aspect, the slits are provided with lacing (60) whereby, when the shoe or boot is being worn, the relative positions of said lateral edges and the opposed side portions of the upper may be controlled.