An elastic band that can be applied to a standard basketball in order to create a training basketball to assist with proper and consistent shooting technique. The removable band can be applied to any standard basketball to offer hand alignment cues for assisting a player in properly placing their fingers and hands in preparation for throwing or “shooting” a ball. The removable band can also be applied to offer a visual cue indicating the proper rotational alignment of the ball upon being thrown or “shot”. If the ball is thrown or “shot” correctly, the band will stay perpendicular to the direction of flight, and provide the user with immediate feedback that the proper technique was used.
ELASTIC BAND THAT CAN BE APPLIED TO A BASKETBALL AND USED FOR TACTILE AND VISUAL GUIDANCE FOR THROWING OR SHOOTING A BASKETBALL

BACKGROUND OF INVENTION

[0001] The present invention generally relates to basketball training device. More particularly, the present invention relates to a basketball training system, device, and method that presents a tactile and visual reference for proper basketball “shooting” instruction when used by an athlete or player. The present invention further relates to such devices, systems, and methods that do not require the athlete or player to wear specialized equipment, but rather rely on a removable elastic band that can be placed around the entire circumference of a basketball. This removable band is used as a tactile guide for a player’s hand position or “grip of the basketball”, as well as providing immediate visual feedback to the athlete when the proper technique was employed to throw or “shoot” the basketball with proper rotation or “backspin” during flight.

[0002] Athletes participating in basketball are required to maintain proper and consistent hand position on a basketball when shooting in order to achieve accurate results. Especially important is the position and location of the fingertips on the throwing or “shooting” hand as the primary control of directional spin, rotation, and trajectory of the ball in flight. The direction of the spin, the rate of rotation, and the trajectory of the object towards the target are all critical to monitor and practice thru repetition in order to create proper and consistent techniques.

[0003] On traditional basketballs, there is a lack of tactile or visual guidance to help instruct a player in proper hand placement or proper backspin on the release. Shooting a basketball properly and consistently is very complex, and it is very important for player’s to practice proper shooting mechanics in high repetition in order to train or re-train the proper muscle memory. In many cases, not being aware of the proper mechanics to practice will result in players building incorrect muscle memory for shooting, and it will affect the accuracy of their shot. Because of this complexity, players, especially newer players, have a particularly difficult time developing the proper shooting mechanics without the ability to measure the correctness of their hand placement or “grip” and rotation or “backspin”. Therefore, a system, device, and method that can help a player quickly feel the proper hand placement thru a removable tactile guide, and visualize the proper backspin on the release thru a removable visual guide would be advantageous.

[0004] It is not uncommon for sport equipment balls to include special training features for improving a player’s performance and accuracy. Some prior-art attempts include non-removable visual markings on a basketball, as described by Sowders in U.S. Pat. No. 7,041,015 B2. Sowders teaches a basketball shooting aid having visually distinctive designs, configurations and colors for the purpose of sending immediate visual feedback to the athlete, informing the athlete whether the proper technique was employed in the athlete’s grip of the basketball, the athlete’s release of the shot and the arc and rotation of the basketball during flight. However, this device gives no tactile indication of hand positioning, nor is it removable to allow it to be utilized with existing basketballs.

[0005] Page et al., in U.S. Pat. No. 8,632,429 teaches a training game ball is having cues for visually indicating the rotational alignment of the ball when it is thrown. If the ball is improperly thrown so that the axis of rotation does not stay perpendicular to the direction of flight, then the rotational alignment cue line will appear to wobble as the ball travels. The ball also includes hand alignment cues for assisting a player in properly positioning his or her hands for throwing the ball. Each of the cues may have a different appearance, so that they may be visually distinguished. However, this device is not removable, and cannot be applied to an existing basketball.

[0006] Another example of a basketball training device that offers training guides is described by Vironmotez in U.S. Pat. No. D727,445, which is a basketball formed with a raised element that extends over a central portion of the panel, such as a raised rib or other structure. However, this device is not removable, and cannot be applied to a standard basketball.

[0007] While some of the prior solutions are similar, none of the prior art devices provide a method where the solution is removable, or applicable to a standard basketball.

[0008] Thus, it would be advantageous to have a sports training device that could be applied to an existing standard basketball as shown in FIG. 4, and create a tactile and visual reference for proper basketball “shooting” instruction when used by an athlete or player. It would further be advantageous to be able to remove the training device from the basketball once the training session is complete in order to return the standard basketball to its normal state. It would be further advantageous to offer several color options to enhance color contrast between the basketball and the training device, thus enhancing visibility during use. Therefore, there remains a need for a system, device, and method that provides a removable solution for converting a standard basketball into a training device to enhance tactile hand position or “grip of the ball” as well as visualization of the alignment and rotation of the ball as it is thrown or “shot” towards a target.

BRIEF DESCRIPTION OF DRAWINGS

[0009] FIG. 1 is a front view of a first embodiment of the present invention.

[0010] FIG. 2 is a ¾ view of the embodiment of FIG. 1.

[0011] FIG. 3 is side view of the embodiment of FIG. 1.

[0012] FIG. 4 is a visual diagram of the application of the present invention to a standard basketball.

DESCRIPTION OF THE INVENTION

[0013] Possible embodiments will now be described with reference to the drawings and those skilled in the art will understand that alternative configurations and combinations of components may be substituted without subtracting from the invention. Also, in some figures certain components are omitted to more clearly illustrate the invention.

[0014] In a contemplated embodiment, the present invention, when applied to a ball, enhances tactile hand position or “grip of the ball” as well as visualization of the alignment and rotation of the ball as it is thrown or “shot” towards a target. This embodiment is detailed herein: However, those skilled in the art will appreciate that subtle changes or reconfigurations are possible, making the present invention easily adaptable for training other sports with projectile balls, but not limited to, soccer, baseball, volleyball, and other team or individual sports.

[0015] FIGS. 1 thru 3 illustrate a contemplated device of the present invention. The device includes an autoclave elastic band made of food grade silicon with a 25 A durometer,
and a heat capacity of 700 degrees Fahrenheit. However there are variations in those materials and construction of the band, as would be appreciated by those skilled in the art. FIG. 4 illustrates one preferred embodiment of the present invention when applied to a standard basketball.

[0016] With particular reference to FIG. 4, the present invention is a device 15 that has the proper elastic properties to fit appropriately to a regulation men’s or women’s basketball without slipping off during use. One contemplated dimension is: Men’s—12"×1.0"×0.079", Women’s/Youth—10"×1.0"×0.079". However there are variations in those dimensions, as would be appreciated by those skilled in the art.


[0018] A player/coach/parent will set up the device 15 by applying it directly around the entire circumference of a standard basketball, perpendicular to the basketball seams. Once applied, the player grips the ball in shooting position, placing the index finger and middle finger from their shooting hand on either side of the elastic band, using the elastic band as the tactile guide. This will insure that the athlete’s shooting hand is centered in the middle of the basketball, creating balanced grip and hand position.

[0019] The player’s guide hand will be placed on the side of the ball with no contact with the elastic band. This will ensure the guide hand is only used for balancing the ball on the shooting hand, and not used to propel the throw or “shot”. Upon throwing or “shooting” the basketball, the player will execute the shooting motion in a way that allows the ball to roll off the index and middle fingers on the shooting hand. By placing the index finger and middle finger on each side of the elastic band, that will ensure those two fingers are controlling the spin, rate of rotation, and trajectory of the ball in flight. After the ball is released, the present invention will provide the athlete with immediate feedback if the ball was shot with the proper release or not. If the present invention is clearly visible in consistent rotational alignment with the target, it will provide immediate feedback to the athlete that the shot was released with the proper form. If the present invention is not clearly visible or “wobbly”, the rotational alignment is not aligned with the target, it will provide immediate feedback to the athlete that the shot was released with improper form.

I claim:

1. The invention shown and described herein.
2. A method of using the invention shown herein as a training tool for athletes, particularly for basketball.
3. A device comprising:
   - an elastic band

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