A sportsboard locking arrangement for a sportsboard having a surface and a receiving slot indentedly formed on the surface, wherein the sportsboard locking arrangement includes a locking guider having a guiding member defining a locker guiding hole thereon and two pivot arms downwardly extended from the guiding member; and a mounting device for pivotally mounting the two pivot arms of the locking guider on two sidewalls of the receiving slot. Therefore, when the guiding member the locking guider is folded above the surface of the sportsboard, a fastener is adapted to pass through the locker guiding hole of the locking guider to lock up the sportsboard to a fixture.
SPORTSBOARD LOCKING ARRANGEMENT

BACKGROUND OF THE PRESENT INVENTION

[0001] 1. Field of Invention

[0002] The present invention relates to sportsboard, and more particularly to a sportsboard comprising a locking arrangement which is capable of securely and conveniently locking the sportsboard onto a fixture so as to avoid being stolen.

[0003] 2. Description of Related Arts

[0004] Conventional sportsboard, such as a surfboard, are widely utilized by those who love water sports including the likes of surfing, wake riding, snowboarding, kayaking, and skating. A conventional sportsboard usually comprises a riding board having a predetermined shape which is adapted to fit a predetermined water sports, and a stabilizing device, such as a fin, extended from the riding board for steering, propelling and stabilizing of the sportsboard when it is gliding on a water surface.

[0005] Conventional sportsboard has a pressing disadvantage of lacking an effective locking device for locking the sportsboard when it is not in use in order to prevent such undesirable conduct as theft. The underlying difficulty in designing such a locking device lies with its interference with the normal operation of the sportsboard. Specifically, any add on locking device is liable to deteriorate the performance of the sportsboard. This perhaps small and insignificant deterioration in performance may become material when it is to be utilized in professional competition in which extremely accurate assessment of performance is required. Thus, a small deterioration in performance may result in material alteration in the ranking in a particular water sports competition.

[0006] Obviously, the deterioration in performance is not necessarily material when the sportsboard is utilized only for entertainment purpose. However, it doesn’t mean that it poses no problem when the add-on locking device, such as a locking hole drilled on the riding board, affects the stability of the whole sportsboard. As such, it is even unsafe that the sportsboard is to be utilized for water sports.

[0007] Even though the locking device does not affect the general stability of the sportsboard, it may present a danger to the user during the course of the water sports. For example, during surfing, the user may unexpectedly encounter an intensely strong wave which brings the user out of the riding board. Normally, the user should be able to swim and grab the riding board so as not to get lost of floating support in the water. However, it is possible that the locking device, due to random motion driven by the strong wave, accidentally hit the user, then, the user may no longer be able to grab the sportsboard tightly and then gain control thereof. In other words, the locking device may pose a danger to the user.

[0008] Since the sportsboard is fairly expensive, it is necessary to protect it from being stolen, especially when it is not in use. However, with the above-mentioned problems, conventional locking device seems to provide the locking function at the expense of the quality of performance, which is definitely undesirable. This presents a rather paradoxical dilemma in which two conflicting considerations equally prevail. In view of this, a novel sportsboard with a locking arrangement which is capable of overcoming the above-mentioned difficulties has to be developed.

SUMMARY OF THE PRESENT INVENTION

[0009] A main object of the present invention is to provide a sportsboard locking arrangement, which provides a locker guider on the sportsboard for firmly locking the sportsboards with a fixture through a fastener so as to avoid the sportsboard from being stolen.

[0010] Another object of the present invention is to provide a sportsboard locking arrangement, which is adapted to operate between a locking position and a storage position, wherein in the locking position, the locking arrangement is to firmly lock the sportsboard in order to avoid the sportsboard from being stolen, wherein in the storage position, the locking arrangement is received in the sportsboard so as not to interfere with the normal operation of the sportsboard.

[0011] Another object of the present invention is to provide a sportsboard locking arrangement, which is adapted for use in conjunction with conventional locking devices, such as a regular lock, so that no specifically-designed equipments are needed. In other words, no unnecessary expense will be incurred to the user for buying any specific equipment in using the present invention.

[0012] Another object of the present invention is to provide a sportsboard locking arrangement, which is adapted for use effectively in a wide variety of sportsboards so as to generally enhance security for conventional sportsboards.

[0013] Another object of the present invention is to provide a sportsboard locking arrangement, which does not alter the original design and structure of the sportsboard, so as to minimize the manufacturing cost and the ultimate selling price of the present invention.

[0014] Another object of the present invention is to provide a sportsboard locking arrangement, which is easy and convenient to operate, but provides sound security protection to the sportsboard from theft.

[0015] Accordingly, in order to accomplish the above objects, the present invention provides a sportsboard locking arrangement for a sportsboard having a surface and a receiving slot indented thereon, wherein the sportsboard locking arrangement comprises:

[0016] a locking guider having a guiding member defining a locking hole thereon and two pivot arms downwardly extended from the guiding member wherein a distance between the two pivot arms of the locking guider is smaller than a width of the receiving slot, and

[0017] means for pivotally mounting the two pivot arms of the locking guider on two sidewalls of the receiving slot, wherein the locking guider is adapted for pivotally moving between a locking position that the guiding member is pivotally folded at a position above the surface of the sportsboard, and a storage position where the guiding member is pivotally folded into the receiving slot below the surface of the sportsboard;
whereby, when the locking guider is folded at the locking position, a fastener is adapted to pass through the locker guiding hole of the locking guider to lock up the sportsboard to a fixture.

These and other objectives, features, and advantages of the present invention will become apparent from the following detailed description, the accompanying drawings, and the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a sportsboard incorporating with a sportsboard locking arrangement according to a first preferred embodiment of the present invention.

FIG. 2 is a sectional side view of the sportsboard locking arrangement according to the above first preferred embodiment of the present invention.

FIG. 3 is an alternative mode of the sportsboard locking arrangement according to the above first preferred embodiment of the present invention.

FIG. 4 is a perspective view of a sportsboard incorporating with a sportsboard locking arrangement according to a second preferred embodiment of the present invention.

FIG. 5 is a plan view of the sportsboard locking arrangement according to the above second preferred embodiment of the present invention.

FIG. 6 is an alternative mode of the sportsboard locking arrangement according to the above second preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1 of the drawings, a sportsboard 1 incorporating with a sportsboard locking arrangement according to a first preferred embodiment of the present invention is illustrated, in which the sportsboard 1, such as a regular surf board, has a surface 2 and a receiving slot 3 is indent thereon.

The sportsboard 1 is embodied as a surf-board having a propelling fin outwardly extended from the receiving slot 3 for propelling and stabilizing the sportsboard 1 while it is surfing on a water surface. Alternatively, the sportsboard 1 can be embodied as a skateboard wherein the receiving slot 3 is formed on one of the surface 2 of the skateboard.

According to the preferred embodiment, the sportsboard locking arrangement is utilized for locking the sportsboard 1 with an external fixture via a fastener 4 so as to prevent the sportsboard 1 from being stolen when it is not in use and left unattended. According to the preferred embodiment, the sportsboard locking arrangement comprises a locking guider 10, and means 20 for pivotally mounting the locking guider 10 to the receiving slot 3.

The mounting means 20 is utilized for mounting two pivot arms 12 of the locking guider 10 to two sidewalls of the receiving slot 3 respectively, wherein the locking guider 10 is adapted for pivotally moving between a locking position that the guiding member 11 of the locking guider 10 is pivotally folded at a position above the surface 2 of the sportsboard 1, and a storage position that the guiding member 11 of the locking guider 10 is pivotally folded into the receiving slot 3 below the surface 2 of the sportsboard 1. Therefore, when the locking guider 10 is folded at the locking position, the fastener 4 is adapted to pass through the locker guiding hole 11 of the locking guider 10 to lock up the sportsboard 1 to a fixture, such as a column or a fence in order to avoid unauthorized seizure of the sportsboard 1.

The locking guider 10 comprises a guiding member 11 defining a locker guiding hole 111 thereon and two pivot arms 12 downwardly extended from the guiding member 11 wherein a distance between the two pivot arms 12 of the locking guider 10 is smaller than a width of the receiving slot 3, so that the locking guider 10 is adapted to be pivotally received in the receiving slot 3.

The pivot arms 12 of the locking guider 10 are integrally extended from the guiding member 11 thereof to form a U-shaped member to define the locker guiding hole 111 within said locking guider 10, wherein the locking guider 10 is adapted for pivotally mounting to the receiving slot 3 having an elongated structure via the mounting means 20.

Accordingly, the U-shaped locking guider 10 allows the fastener 4, such as a fastening string, to pass through the locker guiding hole 111 so as to lock up the sportsboard 1 with the external fixture. Moreover, the two pivot arms 12 are spacedly extended from the guiding member 11 while the U-shaped locking guider 10 is specifically fitted into the elongated receiving slot 3 of the sportsboard 1.

As shown in FIG. 2, each of the pivot arms 12 of the locking guider 10 has a blocking edge 121 for substantially biasing against a bottom wall of the receiving slot 3 of the sportsboard 1, so as to retain the locking guider 10 at the locking position. Accordingly, each of the pivot arms 12, having a L-shaped cross section, has a bottom surface defining the blocking edge 121 thereon wherein the locking guider 10 is pivotally and upwardly folded from the receiving slot 3 until the blocking edges 121 of the locking guider 10 bias against the bottom wall of the receiving slot 3 so as to block up a further pivot movement of the locking guider 10 when the locking guider 10 is folded at the locking position.

It is worth to mention that in order to completely receive the locking guider 10 in the receiving slot 3 of the sportsboard 1, a depth of the receiving slot 3 must be greater than a thickness of the locking guider 10 so that when the locking guider 10 is folded at the storage position, the locking guider 10 is arranged to be received in a position below or at most substantially align with the surface 2 of the sportsboard 1. In other words, the thickness of the locking guider 10 is smaller than the depth of the receiving slot 3 such that the locking guider 10 is capable of being received in the receiving slot 3 of said sportsboard 1 below the surface 2 thereof when the locking guider 10 is folded in the receiving slot 3.

Referring to FIG. 2 of the drawings, the pivotal mounting means 20 comprises a mounting axle 21 transversely mounted in the receiving slot 3 of the sportsboard 1 on the two sidewalls of the receiving slot 3 wherein the two
pivot arms 12 of the locking guider 10 are rotatably engaged with two end portions of the mounting axle 21 so as to pivotally mount the locking guider 10 within the receiving slot 3. In other words, the locking guider 10 is capable of pivotally moving between the locking position and the storage position about the locking member 21.

[0036] According to the first preferred embodiment, the mounting axle 21 is preferably embodied as a cylindrical pin having two ends connected to the two sidewalls of the receiving slot 3 respectively so as to pivotally connect with the locking guider 10 of the sportsboard locking arrangement.

[0037] It is worth to mention that when the locking guider 10 is in the storage position, it is arranged to be completely received in the receiving slot 3 so that it does not protrude from the surface 2 so as to minimize interference to the user who is riding on the surface 2. In other words, the sportsboard locking arrangement does not materially affect the quality performance of the sportsboard 1 during the course of its normal operation, nor risking to cause undesirable harm to the user of the present invention.

[0038] The operation of the sportsboard locking arrangement is elaborated as follows: when a user of the present invention wants to lock up the sportsboard 1 in a particular fixture, he/she should pivotally move the locking guider 10 from the receiving slot 3 to the locking position, then, he/she should pass the fastener 4 through the locker guiding hole 111 and fasten the fastener 4 to the fixture to which the user wants to lock the sportsboard 1, usually via an conventional lock, as shown in FIG. 1 of the drawings.

[0039] It is important to point out that the sportsboard 1 as disclosed above may be utilized for a wide variety of sports, such as that for skating, surfing, and the likes. As a result, the sportsboard locking arrangement can be adopted for use in a wide variety of events and sportsboards 80.

[0040] FIG. 3 illustrates an alternative mode of the mounting means of the sportsboard locking arrangement according to the first preferred embodiment of the present invention. Accordingly, the mounting means 20 comprises two connecting elements 22, which are preferably embodied as two connecting screws, pivotally mounting the two pivot arms 12 of the locking guider 10 to the two sidewalls of the receiving slot 3 in such a manner that the locking guider 10 is capable of pivotally moving between the locking position and the storage position.

[0041] Referring to FIG. 4 of the drawings, a sportsboard 1' incorporating a sportsboard locking arrangement according to a second preferred embodiment of the present invention is illustrated, in which the sportsboard 1' has a surface 2' and a circular receiving slot 3' indent thereon.

[0042] According to the second preferred embodiment, the sportsboard locking arrangement comprises a locking guider 10', and means 20' for pivotally mounting the locking guider 10' in the receiving slot 3'.

[0043] The locking guider 10' has a guiding member 11' defining a locker guiding hole 111' thereon, and two pivot arms 12' downwardly extended from the guiding member 11' wherein a distance between the two pivot arms 12' of the locking guider 10' is smaller than a diameter of the circular receiving slot 3', so that the locking guider 10' is adapted to be pivotally received in the receiving slot 3'.

[0044] According to the second preferred embodiment, the pivot arms 12' of the locking guider 10' are integrally extended from the guiding member 11' thereof to form a semi-circular member to define the locker guiding hole 111' within the locking guider 10', wherein the locking guider 10' is adapted for pivotally mounting to the receiving slot 3' having a circular structure via the mounting means 20'.

[0045] The pivotal mounting means 20' is utilized for mounting two pivot arms 12' of the locking guider 10' to the circular sidewall of the receiving slot 3', wherein the locking member is adapted for pivotally moving between a locking position where the guiding member 11' of the locking guider 10' is pivotally folded at a position above the surface 2' of the sportsboard 1', and a storage position where the guiding member 11' of the locking guider 10' is pivotally folded into the receiving slot 3' below the surface 2' of the sportsboard 1'. Therefore, when the locking guider 10' is folded at the locking position, the fastener 4' is adapted to pass through the locker guiding hole 111' of the locking guider 10' to lock up the sportsboard 1' to a fixture, such as a column or a fence in order to avoid unauthorized seizure of the sportsboard 1'.

[0046] The thickness of the locking guider 10' is smaller than the depth of the receiving slot 3' such that the locking guider 10' is capable of being received in the receiving slot 3' of said sportsboard 1' below the surface 2' thereof when the locking guider 10' is folded in the receiving slot 3'.

[0047] Referring to FIG. 4 and FIG. 5 of the drawings, the mounting means 20' comprises a mounting axle 21' transversely mounted in the circular receiving slot 3' of the sportsboard 1' on the opposing sidewall thereof wherein the two pivot arms 12' of the locking guider 10' rotatably engaged with two end portions of the mounting axle 21' so as to pivotally mount the locking guider 10' into the receiving slot 3' via the mounting axle 21'. Accordingly, the locking guider 10' is capable of pivotally moving between the locking position and the storage position about the mounting axle 21'.

[0048] According to the second preferred embodiment, the mounting axle 21' is preferably embodied as a cylindrical pin having two ends transversely connected to the opposing and circular sidewall of the receiving slot 3' so as to pivotally connect with the locking guider 10' of the sportsboard locking arrangement.

[0049] Due to the circular shape of the receiving slot 3', each of the pivot arms 12' of the locking guider 10' has an outer slanted surface 121' extended inwardly for allowing the locking guider 10' to be pivotally folded into the receiving slot 3' of the sportsboard 1'. As shown in FIG. 5, each of the pivot arms 12' has a thickness gradually reducing to a free end to define the outer slanted surface 121'. Therefore, when the locking guider 10' is folded into the receiving slot 3', two clearances are respectively formed between the two outer slanted surfaces 121' of the pivot arms 12' and the circular sidewall of the receiving slot 3' such that the locking guider 10' can be entirely received into the receiving slot 3' at the storage position.

[0050] It is worth mentioning that when the locking guider 10' is in the storage position, it is arranged to be completely
received in the receiving slot 3" so that it does not protrude from the surface 2" so as to minimize interference to the user who is riding on the surface 2". In other words, the sportsboard locking arrangement does not materially affect the quality performance of the sportsboard 1" during the course of its normal operation, nor risking to cause undesirable harm to the user of the present invention.

[0051] The operation of the sportsboard locking arrangement is elaborated as follows: when a user of the present invention wants to lock up the sportsboard 1" in a particular fixture, he/she should pivotally move the locking guider 10 into the locking position, then, he/she should pass the fastener 4" through the locker guiding hole 111" and fasten the fastener to the fixture to which the user wants to lock the sportsboard 1", usually via a conventional lock, as shown in FIG. 4 of the drawings.

[0052] Referring to FIG. 6 of the drawings, an alternative mode of the sportsboard locking arrangement according to the second preferred embodiment of the present invention is illustrated, in which the mounting means 20A comprises two connecting elements 22A, which are preferably embodied as two connecting screws, pivotally and transversely mounting the two pivot arms 12A of the locking guider 10A to the circular sidewall of the receiving slot 13A in such a manner that the locking guider 10A is capable of pivotally moving between the locking position and the storage position.

[0053] One skilled in the art will understand that the embodiment of the present invention as shown in the drawings and described above is exemplary only and not intended to be limiting.

[0054] It will thus be seen that the objects of the present invention have been fully and effectively accomplished. It embodiments have been shown and described for the purposes of illustrating the functional and structural principles of the present invention and is subject to change without departure from such principles. Therefore, this invention includes all modifications encompassed within the spirit and scope of the following claims.

1. (canceled)

2. The sportsboard locking arrangement, as recited in claim 1, wherein said pivot arms of said locking guider are integrally extended from said guiding member thereof to form a U-shaped member to define said locking guiding hole within said guiding member, wherein said locking guider is adapted for pivotally mounting to said receiving slot having an elongated structure via said mounting means.

3. The sportsboard locking arrangement, as recited in claim 1, wherein said mounting means comprises a mounting axe for transversely mounting in the receiving slot of the sportsboard between said two sidewalks thereof, wherein said two pivot arms of said locking guider are rotatably engaged with two end portions of said mounting axe so as to pivotally mount said locking guider within said receiving slot.

4. The sportsboard locking arrangement, as recited in claim 2, wherein said mounting means comprises a mounting axe for transversely mounting in the receiving slot of the sportsboard between said two sidewalks thereof, wherein said two pivot arms of said locking guider are rotatably engaged with two end portions of said mounting axe so as to pivotally mount said locking guider within said receiving slot.

5. The sportsboard locking arrangement, as recited in claim 1, wherein each of said pivot arms of said locking guider has a blocking edge formed at a bottom side of said pivot arm for substantially biasing against a bottom wall of said receiving slot of said sportsboard, so as to retain said locking guider at said locking position.

6. The sportsboard locking arrangement, as recited in claim 4, wherein each of said pivot arms of said locking guider has a blocking edge formed at a bottom side of said pivot arm for substantially biasing against a bottom wall of said receiving slot of said sportsboard, so as to retain said locking guider at said locking position.

7. The sportsboard locking arrangement, as recited in claim 2, wherein a thickness of said locking guider is smaller than a depth of said receiving slot such that said locking guider is capable of being received in the receiving slot of said sportsboard below said surface thereof when said locking guider is folded in said receiving slot.

8. The sportsboard locking arrangement, as recited in claim 4, wherein a thickness of said locking guider is smaller than a depth of said receiving slot such that said locking guider is capable of being received in said receiving slot of said sportsboard below said surface thereof when said locking guider is folded in said receiving slot.

9. The sportsboard locking arrangement, as recited in claim 6, wherein a thickness of said locking guider is smaller than a depth of the receiving slot such that said locking guider is capable of being received in the receiving slot of said sportsboard below said surface thereof when said locking guider is folded in said receiving slot.

10. The sportsboard locking arrangement, as recited in claim 2, wherein said mounting means comprises two connecting elements pivotally mounting said two pivot arms of said locking guider to said sidewalks of the receiving slot such that said locking guider is capable of moving between said locking position and said storage position.

11. The sportsboard locking arrangement, as recited in claim 10, wherein each of said pivot arms of said locking guider has a blocking edge formed at a bottom side of said pivot arm for substantially biasing against a bottom wall of said receiving slot of said sportsboard, so as to retain said locking guider at said locking position.

12. The sportsboard locking arrangement, as recited in claim 11, wherein a thickness of said locking guider is smaller than a depth of the receiving slot such that said locking guider is capable of being received in the receiving slot of said sportsboard below said surface thereof when said locking guider is folded in said receiving slot.

13-21. (canceled)

22. A sportsboard locking arrangement for a sportsboard having a surface and a receiving slot indented on said surface, wherein said sportsboard locking arrangement comprises:

a locking guider having a guiding member defining a locking guiding hole therein and at least a pivot arm downwardly extended from said guiding member into said receiving slot; and

means for pivotally mounting said pivot arm of said locking guider between two sidewalks of said receiving slot respectively, wherein said locking guider is adapted for pivotally moving between a locking position that said guiding member of said locking guider is pivotally folded at a position above said surface of said
said locker guiding hole of said locking guider to lock up said sportsboard to a fixture.

24. The sportsboard locking arrangement, as recited in claim 23, wherein a thickness of said locking guider is smaller than a depth of the receiving slot such that said locking guider is capable of being received in the receiving slot of said sportsboard below said surface thereof when said locking guider is folded in said receiving slot.

25. A sportsboard locking arrangement for a sportsboard having a surface and a receiving slot indented on said surface, wherein said sportsboard locking arrangement comprises:

a locking guider having a guiding member defining a locker guiding hole therein and at least a pivot arm downwardly extended from said guiding member smaller into said receiving slot; and

means for pivotally mounting said pivot arm of said locking guider between two sidewalls of said receiving slot respectively, wherein said mounting means comprises two connecting elements pivotally mounting said pivot arm of said locking guider to said sidewalls of the receiving slot; wherein said locking guider is adapted for pivotally moving between a locking position that said guiding member of said locking guider is pivotally folded at a position above said surface of said sportsboard, and a storage position where said guiding member of said locking guider is pivotally folded at a position below said surface of said sportsboard, wherein each pivot end portion of said locking guider has an outer slanted surface extended inwardly for allowing said locking guider to be pivotally folded into said receiving slot below said surface of said sportsboard, wherein said pivot arm of said locking guider is integrally extended from said guiding member thereof to define said locker guiding hole in said locking guider, wherein said locking guider is adapted for pivotally mounting to said receiving slot having a circular structure via said mounting means;

whereby, when said locking guider is folded at said locking position, a fastener is adapted to pass through said locker guiding hole of said locking guider to lock up said sportsboard to a fixture.