A braking assembly for use with a roller skate, the roller skate being wearable by an intended user having a leg, a foot extending from the leg and a hand. The roller skate has a frame, a foot receiving portion coupled to the frame for receiving the foot of the user and first and second wheels rotatably mounted to the frame, the first and second wheels defining respectively a first wheel radius and a second wheel radius. The first and second wheels further define respectively a first wheel circumferential surface and a second wheel circumferential surface. The braking assembly includes a brake shoe defining a wheel contacting surface, the wheel contacting surface including a first arc segment and a second arc segment for respectively abutting against a portion of the first and second wheel circumferential surfaces, the brake shoe being mountable to the roller skate such as to be movable between a released position and an engaged position, wherein in the released position, the brake shoe is substantially spaced apart from the first and second wheel circumferential surfaces and in the engaged position, the first arc segment frictionally abuts against a portion of the first wheel circumferential surface and the second arc segment frictionally abuts against a portion of the second wheel circumferential surface; and an actuator operatively coupled to the brake shoe for selectively moving the brake shoe between the released and engaged positions.
BRAKING ASSEMBLY FOR A ROLLER SKATE

[0001] This application claims priority from U.S. Provisional Patent Application Ser. No. 60/651,972 filed Feb. 14, 2005.

FIELD OF THE INVENTION

[0002] The present invention relates to roller skates. More specifically, the present invention is concerned with a braking assembly for a roller skate.

BACKGROUND OF THE INVENTION

[0003] There are many techniques and devices usable to slow down or stop while roller-skating. For example, in some roller skates, a brake in the form of a pad of material is provided at one or both extremities of the skate. Then, to brake, the skate user simply tilts his skates so that the block abuts against the surface onto which he is skating. By exerting a suitable pressure with his leg onto the brake pad, the user can control his speed.

[0004] However, currently existing brakes of this type only provide for a relatively slow decrease in speed. Since in recent years skates have improved greatly and are not only used by children but also by well-trained adults, this type of braking technique is relatively inefficient in view of the speeds attained using these roller skates.

[0005] In addition, using this type of brake requires some skill by the user and may create some difficulty for the user to remain in balance. However, it is mainly beginner skaters that are most likely to need braking in case of emergency, as they are relatively inexperienced with the skate. Having to learn the skill for braking in this beginning phase is therefore a disadvantage of currently existing braking assemblies.

[0006] Another technique used by skaters is commonly used by experienced skaters. In this technique, the skater simply positions his skates substantially perpendicular to the direction of motion so that a friction force between the wheels of the skate and the surface onto which the user skates stops the skate. This technique is relatively more efficient than the previously mentioned technique. However, it requires a relatively hard to acquire skill.

[0007] Indeed, there is a need to balance the skater onto the wheels perpendicularly to the direction of motion onto a surface that might be irregular and that might have a coefficient of friction between the wheels and the surface that varies as a function of position on the surface. Also, this technique causes a relatively large amount of wear of the wheels, which are not typically designed to withstand forces produced by this braking technique.

[0008] Another type of braking assembly includes cable-actuated brakes mounted onto the skate. However, such cable-actuated braking assemblies have been relatively unsuccessful as they are relatively cumbersome, relatively expensive and relatively hard to use. Also, in some braking assemblies of this type, the actuator that actuates the brake includes a handle that may injure a skater in case of a fall.

[0009] In some braking assemblies, a brake shoe abuts against the periphery of the wheel. However, currently existing systems of this type have many drawbacks. First, a surface of the brake shoe that contacts the wheel is typically relatively small. This relatively small surface requires that relatively large forces be exerted onto the wheel to stop, which causes the wheels to wear off relatively fast. In some existing systems, a plurality of brake shoes each contacting a respective wheel is used to reduce the force exerted on the wheel. However, using more than one brake shoe typically increases the complexity of the braking assembly, which in turn increase manufacturing costs.

[0010] Also, when more than one brake shoes are used, it is desirable to balance the force exerted onto the wheels by each brake shoe. Indeed, if one brake shoe were to exert a larger force onto one of the wheels, this brake shoe may block this wheel, but not the other wheels. Blocked wheels slide onto the ground surface and therefore wear off relatively rapidly. Balancing this force may require relatively complex systems and relatively tight manufacturing and assembling tolerances.

[0011] In view of the above, there exists a need in the industry to provide a novel braking assembly for a roller skate.

[0012] An object of the present invention is therefore to provide an improved braking assembly for a roller skate.

SUMMARY OF THE INVENTION

[0013] In a first broad aspect, the invention provides a braking assembly for use with a roller skate, the roller skate being wearable by an intended user having a leg, a foot extending from the leg and a hand. The roller skate has a frame, a foot receiving portion coupled to the frame for receiving the foot of the user and first and second wheels rotatably mounted to the frame, the first and second wheels defining respectively a first wheel radius and a second wheel radius. The first and second wheels further define respectively a first wheel circumferential surface and a second wheel circumferential surface. The braking assembly includes:

[0014] a brake shoe defining a wheel contacting surface, the wheel contacting surface including a first arc segment and a second arc segment for respectively abutting against a portion of the first and second wheel circumferential surfaces, the brake shoe being mountable to the roller skate such as to be movable between a released position and an engaged position, wherein in the released position, the brake shoe is substantially spaced apart from the first and second wheel circumferential surfaces and in the engaged position, the first arc segment frictionally abuts against a portion of the first wheel circumferential surface and the second arc segment frictionally abuts against a portion of the second wheel circumferential surface; and

[0015] an actuator operatively coupled to the brake shoe for selectively moving the brake shoe between the released and engaged positions.

[0016] Advantageously, the braking assembly is ergonomic and provides a relatively efficient and a relatively easy manner way of braking, either to completely stop the intended user or to modulate his speed.

[0017] In addition, the braking assembly is relatively easily integrated into currently existing roller skates and is relatively inexpensive to manufacture. Furthermore, the braking assembly is relatively robust, relatively light,
requires a relatively small amount of maintenance and wears off roller skate wheels relatively slowly.

[0018] In some embodiments of the invention, the force exerted on a rearward wheel of the roller skate is smaller than the force exerted on a forward wheel of the roller skate. This helps in preventing the rearward wheel to stop rotating as a result of an unloading of this wheel caused by a deceleration of the user when the brake shoe engages the wheels.

[0019] In some embodiments of the invention, the braking assembly includes a slave bladder for moving the brake shoe and a master bladder for changing the volume of the slave bladder. The master bladder may be detachable from the slave bladder and to allow the intended user to have a skate that is very similar to a conventional skate if he doesn't want to use the braking assembly.

[0020] In a variant, the brake fluid is a gas, such as air. In other variants, the brake fluid is a liquid, such as a brake oil, or any other suitable type of liquid.

[0021] In another broad aspect, the invention provides a roller skate including a braking assembly.

[0022] Other objects, advantages and features of the present invention will become more apparent upon reading of the following non-restrictive description of preferred embodiments thereof, given by way of example only with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023] In the appended drawings:

[0024] FIG. 1, in a side elevation view, illustrates a roller skate in accordance with the invention worn by an intended user, the roller skate including a braking assembly;

[0025] FIG. 2, in a side elevation view, illustrates a slave bladder and a brake shoe of the braking assembly of FIG. 1;

[0026] FIG. 3, in a side cross-sectional view, illustrates the slave bladder and the brake shoe of the braking assembly of FIG. 1;

[0027] FIG. 4, in an exploded perspective view, illustrates an assembly of the slave bladder and the brake shoe of FIG. 1 onto a roller assembly of the skate of FIG. 1;

[0028] FIG. 5, in a top elevation view, illustrates the brake shoe, slave bladder and roller assembly of FIG. 4;

[0029] FIG. 6, in a front cross-sectional view, illustrates the assembled brake shoe, slave bladder and roller assembly of FIG. 4 taken along the line VI-VI of FIG. 3;

[0030] FIG. 7, in a perspective view, illustrates an attachment of the roller assembly of FIG. 4 to a skate boot of the skate of FIG. 1;

[0031] FIG. 8, in a side elevation view, illustrates a harness of the braking assembly of FIG. 1 and a master bladder attached thereto;

[0032] FIG. 9, in a front elevation view, illustrates the harness and master bladder of FIG. 8; and

[0033] FIG. 10, in a side elevation view, illustrates a slave bladder and an alternative brake shoe usable with the skate of FIG. 1.

DETAILED DESCRIPTION

[0034] FIG. 1 illustrates a roller skate 10 for use by an intended user 12, only the leg 13 and waist 15 thereof being shown in the drawings. The intended user 12 has a foot (not shown in the drawings) and uses the roller skate 10 onto a surface (both not shown in the drawings).

[0035] The roller skate 10 includes a foot receiving portion in the form of a skate boot 14 for receiving the foot of the user 12. The roller skate 10 further includes a roller assembly 16 coupled to the skate boot 14. Furthermore, the skate 10 includes a braking assembly 18 operatively coupled to the roller assembly 16 so as to be able to modulate the speed of the intended user 12 when he uses the roller skate 10.

[0036] The skate boot 14 is any suitable skate boot. Such skate boots are well known in the art and the skate boot 14 will therefore not be described in further details. Also, in alternative embodiments of the invention, the skate 10 includes any other suitable foot receiving portion.

[0037] The roller assembly 16 includes a frame 20 and at least one wheel 22. In the drawings, the roller assembly 16 is shown including four wheels 22, 22a, 22b and 22c. However, it is within the scope of the invention to have roller assemblies having any other suitable number of wheels 22. The wheels 22, 22a, 22b and 22c are rotatably mounted to the frame 20 and define respective wheel radii 23, 23a, 23b and 23c: and circumferential surfaces 25, 25a, 25b and 25c. The wheels 22, 22a, 22b: and 22c are mounted to the frame 20 in a conventional manner.

[0038] As shown in FIG. 6, the frame 20 is of a substantially U-shaped cross section. The frame 20 defines a base section 24 and two wheel supporting sections 26 extending substantially downwardly therefrom. The wheel supporting sections 26 define a wheel receiving gap 28 for receiving the wheels 22, 22a, 22b and 22c therein. In some embodiments of the invention, the base section 24 extends laterally outwardly over a greater distance than the lateral extension of the wheel receiving gap 28.

[0039] The braking assembly 18 is a fluid activated braking assembly 18. However, in alternative embodiments of the invention, the braking assembly 18 may be mechanically activated. In some embodiments of the invention, the fluid contained within the braking assembly 18 is a gas and the braking assembly 18 is therefore a pneumatic braking assembly. An example of a suitable gas is air, but other gases are also within the scope of the invention. In alternative embodiments of the invention, the fluid is a liquid and the braking assembly 18 is therefore a hydraulic braking assembly. In this case, examples of suitable braking fluid include water, a water and antifreeze mixture, and a brake oil, among others.

[0040] The braking assembly 18 includes a brake shoe 30, better shown in FIGS. 2 and 3, a master bladder 32, better shown in FIG. 1, a slave bladder 34, better shown in FIGS. 2 and 3, in a fluid communication with the master bladder 32, and a brake fluid (not shown in the drawings) provided within the slave and master bladders 34 and 32. The master and slave bladders 32 and 34 are part of an actuator operatively coupled to the brake shoe 30 for selectively moving the brake shoe 30 between a released position and an engaged position, as further described hereinbelow.
As seen in FIG. 4, the brake shoe 30 includes a brake shoe base 49 and a brake shoe pad 40 extending therefrom. The brake shoe base 49 allows securing the brake shoe 30 to the remaining portions of the skate 10. For example, the brake shoe base 49 is secured to the roller assembly 16.

The brake shoe pad 40 is any suitable brake shoe pad 40. The brake shoe pad 40 defines a wheel contacting surface 45. For example, and not-limitingly, the wheel contacting surface 35 is made of wood or any other suitable materials. This material may be a material that wears off more rapidly than the wheels 22a, 22b and 22c in response to frictional forces between the wheel contacting surface 45 and the wheels 22a, 22b and 22c. In this case, the brake shoe wears off with the wheels, which ensures that the wheel contacting surface 45 exerts a substantially uniform pressure onto the wheel circumferential surfaces 25a, 25b and 25c. Even when the wheels 22a, 22b and 22c change in diameter as they wear off.

In some embodiments of the invention, the brake shoe pad 40 defines a plurality of arc segments 33a, 33b and 33c for respectively abutting against a portion of the wheel circumferential surfaces 25a, 25b and 25c (not shown in FIG. 4).

The brake shoe 30 movable between a released position and an engaged position. In the released position, the brake shoe 30 is substantially spaced apart from the wheel circumferential surfaces 25a, 25b and 25c. In the engaged position, the arc segments 33a, 33b and 33c functionally abut respectively against a portion of the wheel circumferential surfaces 25a, 25b and 25c. For example, FIG. 3 illustrates the brake shoe 30 in the engaged position, while FIG. 2 illustrates the brake shoe 30 in the released position.

The reader skilled in the art will readily appreciate that the number of arc segments 33a, 33b and 33c is not necessarily equal to the number of wheels 22, 22a, 22b and 22c. However, it is within the scope of the invention to have the roller skates wherein the number of arc segments 33a, 33b and 33c is equal to the number of wheels 22, 22a, 22b and 22c.

In some embodiments of the invention, the arc segments 33a, 33b and 33c are shaped to substantially conform to the shape of the wheels 22a, 22b and 22c so as to increase a contact surface between the brake shoe pad 40 and the wheels 22a, 22b and 22c when the brake shoe 30 is in the engaged position. In these embodiments, the arc segments 33a, 33b and 33c have the shape of an arc segment of a circumferential portion of a torus.

To that effect, as seen in FIG. 2 with reference to the wheel 22a, the arc segment 33a defines a first radius of curvature 35a, the first radius of curvature 35a being substantially equal to the wheel radius 23a. A similar relationship exists between the arc segments 33b and 33c and the wheels 22b and 22c.

The arc segment 33a extends over an angle 37a. For example, this angle may vary from about 20 degrees to about 180 degrees. It has been found that good results are obtained with an arc segment 33a that extends over an angle 37a of from about 90 degrees to about 150 degrees, and in a specific example of implementation, of about 120 degrees.

The slave bladder 34 is operatively coupled to the frame 20 and to the brake shoe 30 to move the brake shoe 30 between the released and engaged positions in response to the slave bladder 34 being deflated and inflated. The brake shoe 30 moves towards the engaged position when the slave bladder 34 is inflated and the brake shoe 30 moves towards the released position when the slave bladder 34 is deflated.

The master bladder 32 is in fluid communication with the slave bladder 34. A deformation of the master bladder 32 causes a deformation of the slave bladder 34. In some embodiments of the invention, the master bladder 32 is graspable and deformable by a hand of the intended user.

The master bladder 32 is connected to the slave bladder 34 through a tube 36 to allow the fluid to flow between the slave bladder 34 and the master bladder 32. A valve 86 is provided so as to allow the fluid to flow into and out from the slave bladder 34. The valve 86 is connected to the tube 36 and defines a passageway leading into the interior of the chamber 34.

As illustrated in FIG. 4, the slave bladder 34 includes a substantially elastic material that expands upon the fluid being forced into the slave bladder 34. An example of a suitable slave bladder 34 includes a substantially elongated elastic tube with both tube ends 35 and 37 clamped so as to form a closed chamber. For example, the two ends are clamped between the brake shoe base 49 and the rolling assembly base 24. The configuration of the rolling assembly base 24 allows to exert a pressure onto a relatively large brake shoe base 49, which helps in producing a relatively large pressure onto the wheels 22a, 22b and 22c as the surface of the wheel contacting surface 45 is relatively small as compared to the surface of the brake shoe base. This difference in surface area therefore amplifies a pressure created in the slave bladder 34.

In a specific example of implementation, two end brackets 41 each provided at a respective tube end 35 and 37 helps to clamp the tube ends 35 and 37 between the brake shoe base 49 and the rolling assembly base 24. In some embodiments of the invention, this clamping is performed through the use of rivets 145, such as pop rivets that are inserted through the tube ends 35 and 37, the brake shoe base 49 and the rolling assembly base 24. However, it is within the scope of the invention to clamp the tube ends 35 and 37 between the brake shoe base 49 and the rolling assembly base 24 in any other suitable manner.

As shown in FIGS. 2 and 3, in some embodiments of the invention, the brake shoe 30 is biased towards the released position through biasing elements 38. An example of such a biasing element 38 is a coil spring.

In the specific embodiment of the invention in the drawings, for example as shown in FIG. 1, the roller assembly frame 20 is affixed to the boot 14 through first and second spacers 48 and 50. The spacers 48 and 50 are provided between the base section 24 and the boot 14 and therefore provide a space between the roller assembly 16 and the boot 14. This space allows for the insertion therein of the tube 36 so that it is connectable to the valve 86.

As shown in FIG. 7, the second spacer 50 attaches to the roller assembly 16 through screws 100. In addition, screws 102 are inserted through a sole of the skate boot 14 to secure the second spacer block 50 to the skate boot 14.
The first spacer 48 is similarly secured to the roller assembly 16. In addition, the first and second spacers 48 and 50 are securable to the roller assembly 16 in any other suitable manner, including through the use of rivets and glue, among others.

[0057] As shown in FIG. 4, the slave bladder 34 is provided between the brake shoe 30 and the base section 24. The brake shoe 30 is itself provided between the wheels 22 and the base section 24. The brake shoe 30 is affixed to the base section 24 through bolts 52 onto which the biasing elements 38 are provided. The brake shoe 30 is slidably mounted onto the bolts 52 so as to allow a translational movement between the released and engaged positions of the brake shoe 30.

[0058] For example, the bolts 52 are inserted through the brake shoe base 49, and the roller assembly base 24. The bolts 52 each includes a bolt head 51. The biasing element 38 includes a coil spring provided between the bolt head 51 and the brake shoe base 24. The bolts 50 allow a movement of the brake shoe 30 in a direction substantially perpendicular to a direction of an axis around which the wheels 22 rotate.

[0059] As shown in FIG. 1, in some embodiments of the invention, the tube 36 is a two-part tube having a first and a second tube portion 88 and 90 with a connector 37 inserted therebetween. The first tube portion 88 is in fluid communication with the master chamber 32, while the second tube portion 90 is in fluid communication with the slave chamber 34. The connector 37 allows for easily disconnecting the master bladder 32 from the slave bladder 34. In some embodiments of the invention, the connector 37 is provided onto the tube 36 in proximity to the boot 14 so that when the master bladder 32 is disconnected from the slave bladder 34, the skate 14 is relatively easy to use as a standard skate that does not include the fluid activated braking assembly 18.

[0060] Also, in some embodiments of the invention, the roller skate 10 further includes a harness 54, better illustrated in FIGS. 8 and 9. The harness 54 is securable to the leg 15 of the intended user 12 and the master bladder 32 is attachable thereto. In some embodiments of the invention, the master bladder 32 is permanently affixed to the harness 54. However, in alternative embodiments of the invention, the master bladder 32 is detachable from the harness 54.

[0061] As illustrated in FIG. 8, in some embodiments of the invention, the master bladder 32 is pivotably attached to the harness 54. The pivotable attachment allows the user 12 to position the master bladder 32 in a relatively ergonomic position that allows the user 12 to exert a relatively strong grasping force when grasping the master bladder 32. However, in other embodiments of the invention, the master bladder 32 is not pivotably attached to the harness 54.

[0062] The harness 54 includes a base 55 from which a strap 56 extends, which includes a fastener 57, and a belt securing portion 58. The strap 56 is provided for encircling the leg of the user, when the fastener 57 is fastened, while the belt securing portion 58 is securable to a belt 60 worn by the user 12. Therefore, leg fastening strap 56 and the belt securing portion 58 allow to relatively easily secure the master bladder 32 through the harness 54 to the user 12.

[0063] In some embodiments of the invention, the harness 54 includes a substantially flexible harness base 55 that substantially conforms to the shape of the leg of the user 12 so as to improve comfort. For example, the harness base 55 is substantially triangular.

[0064] In some embodiments of the invention, as shown in FIG. 1, the skate 10 is further usable in conjunction with knee pads 61 onto which a securing loop 62 is provided. The securing loop 62 receives the tube 36 thereto so as to further secure the braking assembly 18 to the user 12.

[0065] In use, the user skates with the harness 54 properly secured to his leg 15 and belt 60. When the user wishes to apply brakes to the skates 10 so as to modulate his speed or totally block the wheels 22a, 22b and 22c, the user grasps the master bladder 32 within his hand and applies thereon a suitable force. This in turn pushes the fluid through the tube 36 and into the slave bladder 34.

[0066] The slave bladder 34 therefore expands and thereby pushes the brake shoe 30 towards the wheels 22a, 22b and 22c into the engaged position. This exerts a force onto the wheels 22a, 22b and 22c and either stops the wheel 22a, 22b and 22c from turning or slows the speed of rotation of the wheels 22a, 22b and 22c, depending on the force exerted by the user 12.

[0067] As the reader skilled in the art will readily appreciate, grasping the slave bladder 32 also allows to stop the wheels 22a, 22b and 22c from turning to allow, for example, the user to climb stairs or to stay relatively immobile.

[0068] When the user 12 releases the master bladder 32, the biasing elements 38 bias the brake shoe 30 toward the released position. This pushes the fluid outside the slave bladder 34 through the tube 36 and into the master bladder 32. Therefore, the brake shoe 30 moves towards the released position and the wheels 22a, 22b and 22c become free to roll again.

[0069] FIG. 10 illustrates an alternative embodiment of the invention wherein an alternative brake shoe 30 includes an alternative arc segment 33c. The arc segment 33a is located forwardly with respect to the arc segment 33c and extends over an angle 37a that is substantially larger than the angle 37c over which the arc segment 33c extends. Since a substantially uniform pressure is exerted by the brake shoe 30 onto the wheels 22a, 22b and 22c, a total force exerted onto the wheel 22c when the brake shoe 30 is in the engaged position is substantially smaller than a total force exerted onto the wheel 22a by the brake shoe 30. This prevents at least in part the wheel 22c to stop rotating before the wheels 22a and 22b as a result of the weight transfer that occurs when braking.

[0070] For example, and non-limitingly, the angle 37c over which the arc segment 33c extends is from about 15 percent to about 70 percent of the angle 37a the arc segment 33a extends. In a more specific example of implementation, good braking performance was obtained with a brake shoe 30 wherein the angle 37c over which the arc segment 33c extends was about 33 percent of the angle 37a over which the arc segment 33a extends.

[0071] Although the present invention has been described hereinabove by way of preferred embodiments thereof, it can be modified, without departing from the spirit and nature of the subject invention as defined in the appended claims.
What is claimed is:

1. A braking assembly for use with a roller skate, the roller skate being wearable by an intended user having a leg, a foot extending from the leg and a hand, the roller skate having a frame, a foot receiving portion coupled to the frame for receiving the foot of the intended user and first and second wheels rotatably mounted to the frame, the first and second wheels defining respectively a first wheel radius and a second wheel radius, the first and second wheels further defining respectively a first wheel circumferential surface and a second wheel circumferential surface, said braking assembly comprising:

   a brake shoe defining a wheel contacting surface, said wheel contacting surface including a first arc segment and a second arc segment for respectively abutting against a portion of the first and second wheel circumferential surfaces, said brake shoe being mountable to the roller skate such as to be movable between a released position and an engaged position, wherein in said released position, said brake shoe is substantially spaced apart from the first and second wheel circumferential surfaces and in said engaged position, said first arc segment frictionally abuts against a portion of the first wheel circumferential surface and said second arc segment frictionally abuts against a portion of the second wheel circumferential surface; and

   an actuator operatively coupled to said brake shoe for selectively moving said brake shoe between said released and engaged positions.

2. A braking assembly as defined in claim 1, wherein said first arc segment defines a first radius of curvature, said first radius of curvature being substantially equal to the first wheel radius.

3. A braking assembly as defined in claim 2, wherein said second arc segment defines a second radius of curvature, said second radius of curvature being substantially equal to the second wheel radius.

4. A braking assembly as defined in claim 2, wherein said first arc segment extends over an angle of from about 20 degrees to about 180 degrees.

5. A braking assembly as defined in claim 4, wherein said first arc segment extends over an angle of from about 90 degrees to about 150 degrees.

6. A braking assembly as defined in claim 5, wherein said first arc segment extends over an angle of from about 120 degrees.

7. A braking assembly as defined in claim 2, wherein said first arc segment has the shape of an arc segment of a circumferential portion of a torus.

8. A braking assembly as defined in claim 1, wherein said first arc segment extends over a first angle and said second arc segment extends over a second angle, said second angle being substantially smaller than said first angle.

9. A braking assembly as defined in claim 8, wherein the brake defines a front end and a rear end, said first arc segment being located forwardly with respect to said second arc segment.

10. A braking assembly as defined in claim 9, wherein said second angle is from about 15 percent to about 70 percent of said first angle.

11. A braking assembly as defined in claim 10, wherein said second angle is about one third of said first angle.

12. A braking assembly as defined in claim 1, wherein said brake shoe is translated when moved between said released and engaged positions.

13. A braking assembly as defined in claim 1, further comprising a biasing element operatively coupled to said brake shoe and to the frame for biasing said brake shoe towards said released position.

14. A braking assembly as defined in claim 1, wherein said actuator includes a slave bladder operatively coupled to said frame and to said brake shoe to move said brake shoe between said released and engaged positions in response to said slave bladder being deflated and inflated, said brake shoe moving towards said engaged position when said slave bladder is inflated and said brake shoe moving towards said released position when said slave bladder is deflated.

15. A braking assembly as defined in claim 14, further comprising a master bladder in fluid communication with said slave bladder, wherein a deformation of said master bladder causes a deformation of said slave bladder.

16. A braking assembly as defined in claim 15, wherein said master bladder is graspable and deformable by the hand of the intended user.

17. A braking assembly as defined in claim 16, further comprising a harness securable to the intended user, said master bladder being attachable to said harness.

18. A braking assembly as defined in claim 17, wherein said harness includes a harness base and a strap extending therefrom for encircling the leg of the intended user, said master bladder being attachable to said harness base.

19. A braking assembly as defined in claim 18, wherein said slave and master bladders are interconnected by a substantially flexible tube, said tube including a tube first portion in fluid communication with said slave bladder and a tube second portion in fluid communication with said master bladder, said tube first portion being reversibly attachable to said tube second portion, said tube first and second portions being in fluid communication when said tube first portion is attached to said tube second portion.

20. A braking assembly as defined in claim 19, wherein said wheel contacting surface includes wood.

21. A braking assembly as defined in claim 1, wherein said first wheel contacting surface wears off more rapidly than said first wheel in response to frictional forces between said first wheel contacting surface and said first wheel.

22. A roller skate, said roller skate being wearable by an intended user having a leg, a foot extending from the leg and a hand, said roller skate comprising:

   a frame;

   a foot receiving portion coupled to said frame for receiving the foot of the intended user;

   first and second wheels rotatably mounted to said frame, said first and second wheels defining respectively a first wheel radius and a second wheel radius, said first and second wheels further defining respectively a first wheel circumferential surface and a second wheel circumferential surface; and

   a braking assembly including:

   a brake shoe defining a wheel contacting surface, said wheel contacting surface including a first arc segment and a second arc segment for respectively abutting against a portion of said first and second wheel circumferential surfaces, said brake shoe
being mounted to said roller skate such as to be movable between a released position and an engaged position, wherein in said released position, said brake shoe is substantially spaced apart from said first and second wheel circumferential surfaces and in said engaged position, said first arc segment frictionally abuts against a portion of said first wheel circumferential surface and said second arc segment frictionally abuts against a portion of the second wheel circumferential surface; and

an actuator operatively coupled to said brake shoe for selectively moving said brake shoe between said released and engaged positions.

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