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(54) **FLEXIBLE SKI SUPPORT SYSTEM**

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(57) **ABSTRACT**

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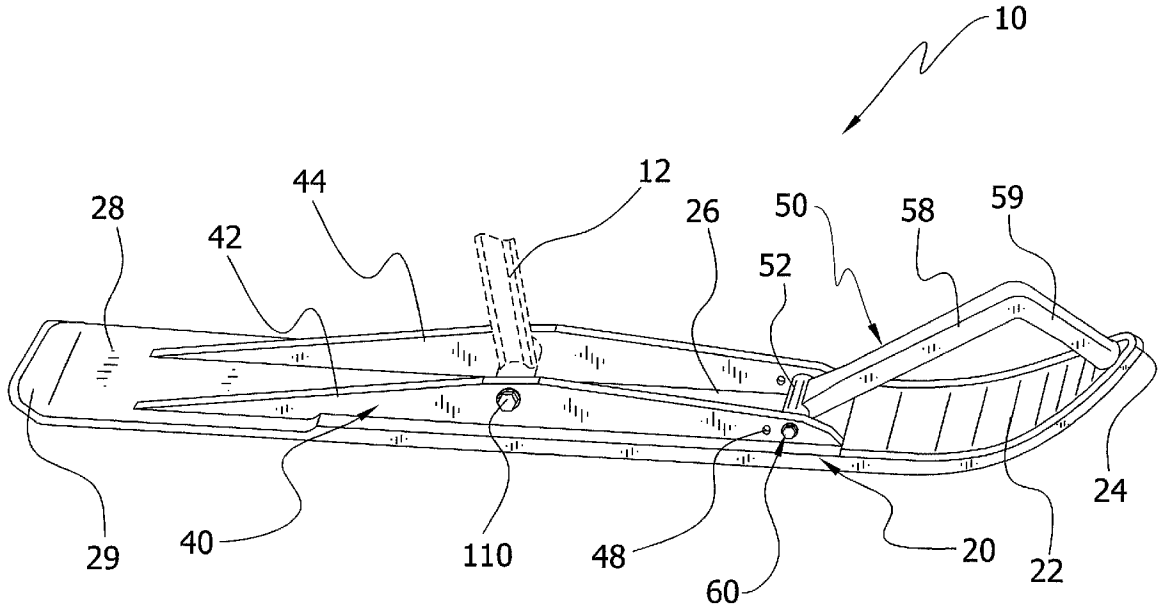
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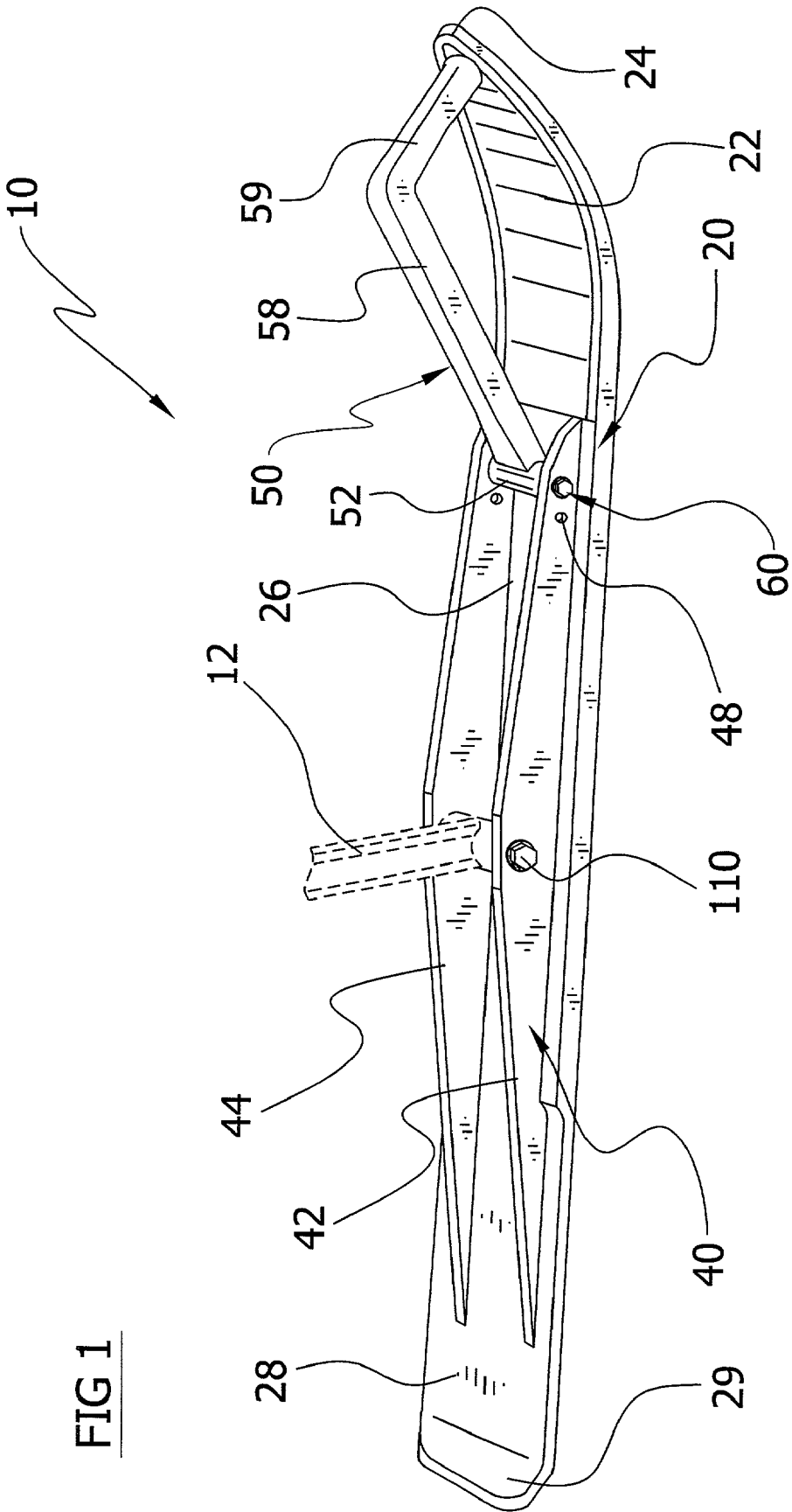
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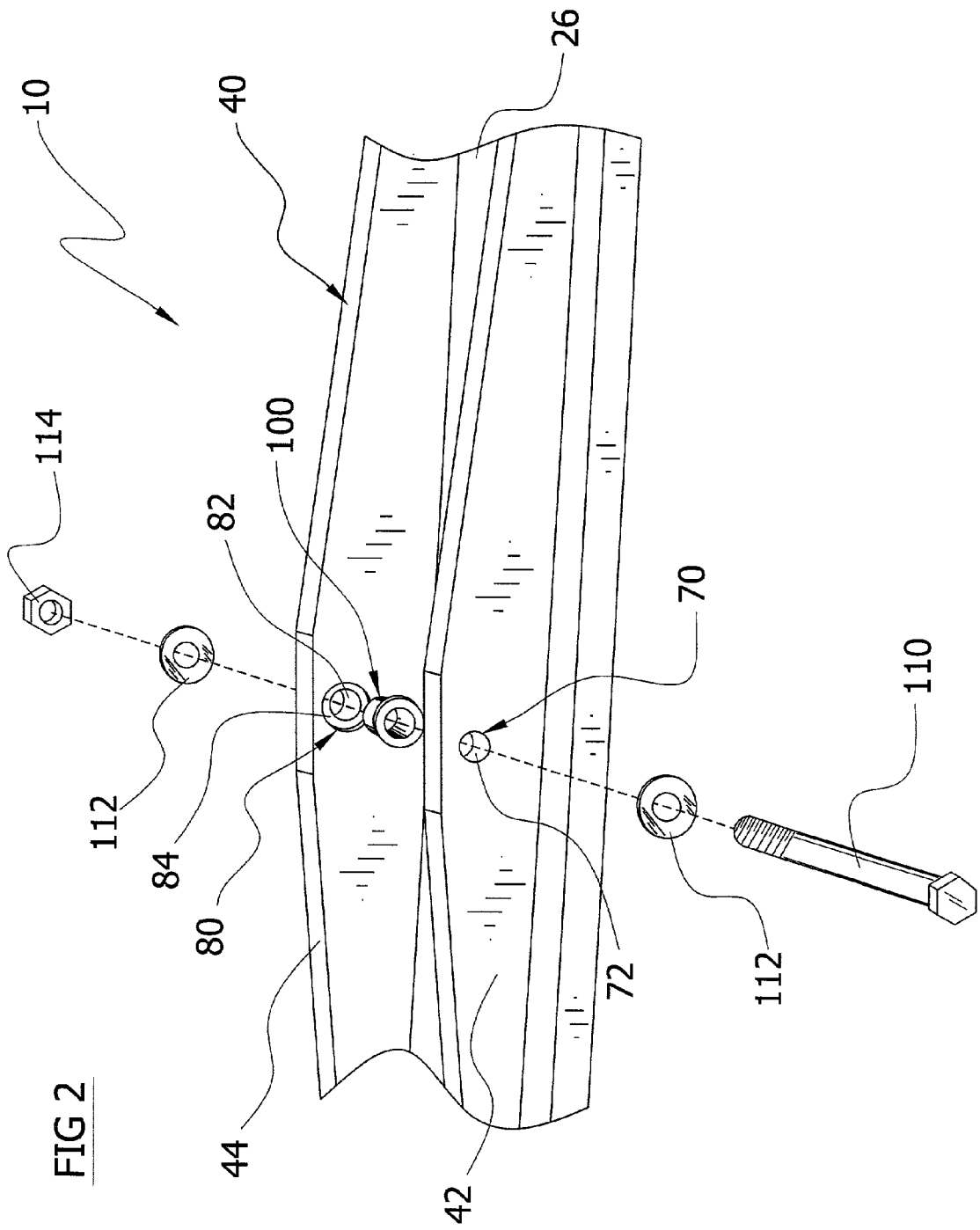
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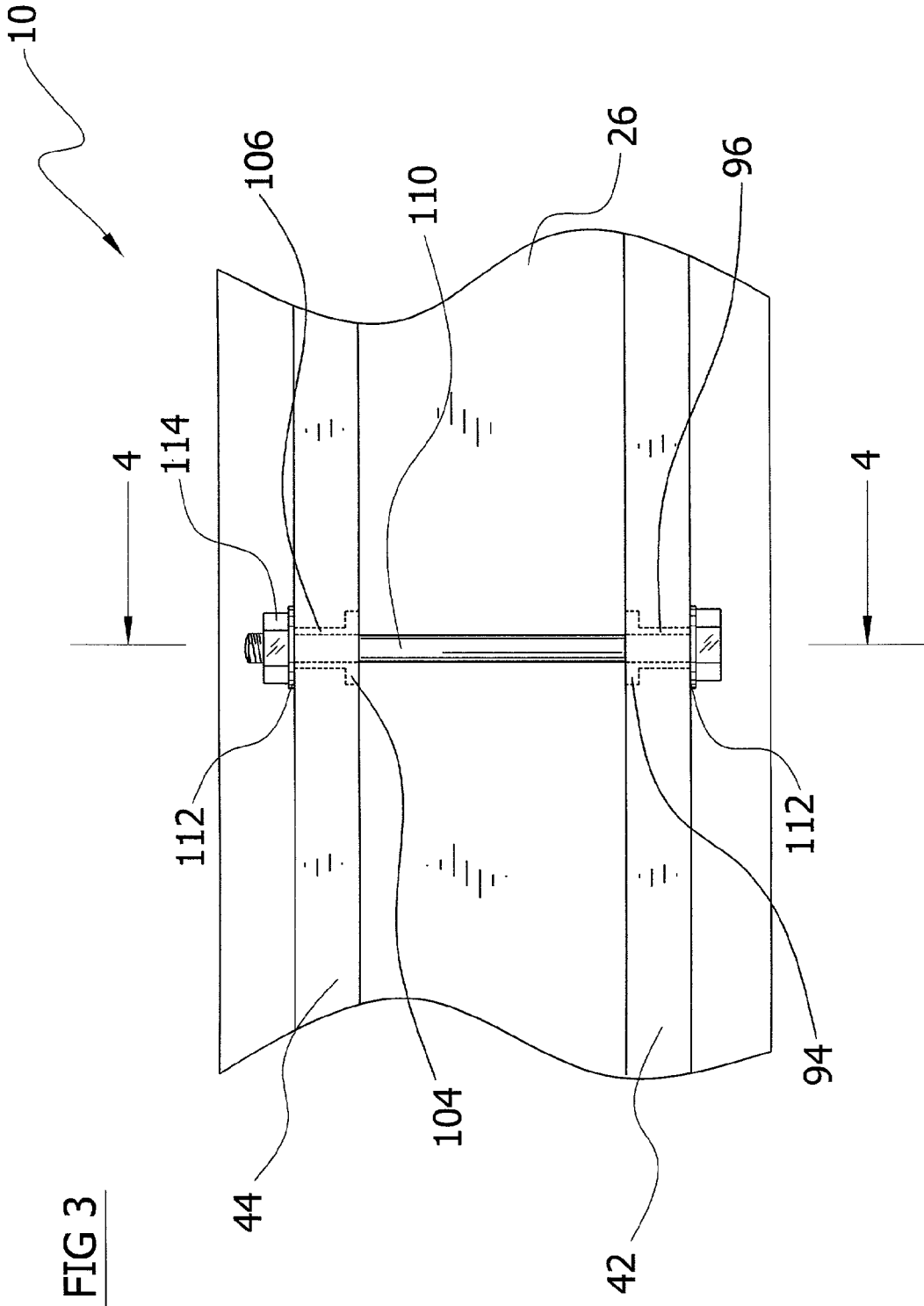
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A flexible ski support system for increasing the overall flexibility of a snowmobile ski through the elimination of a metal saddle. The flexible ski support system consists of a ski having an elongate body and a support portion having a first member and a second member, a first aperture extending within the first member, a second aperture extending within the second member, a first bushing member positioned within the first aperture, and a second bushing member positioned within the second aperture. The elongate body and the support portion are both molded into a one-piece structure from a relatively highly flexible material such as plastic. The bushing members each have a concentric bore for receiving a connecting pin for allowing attachment to a suspension arm of a snowmobile. The bushing members distribute the vertical and horizontal forces over a relatively broad area within the support portion thereby preventing damage or breakage to the support portion.









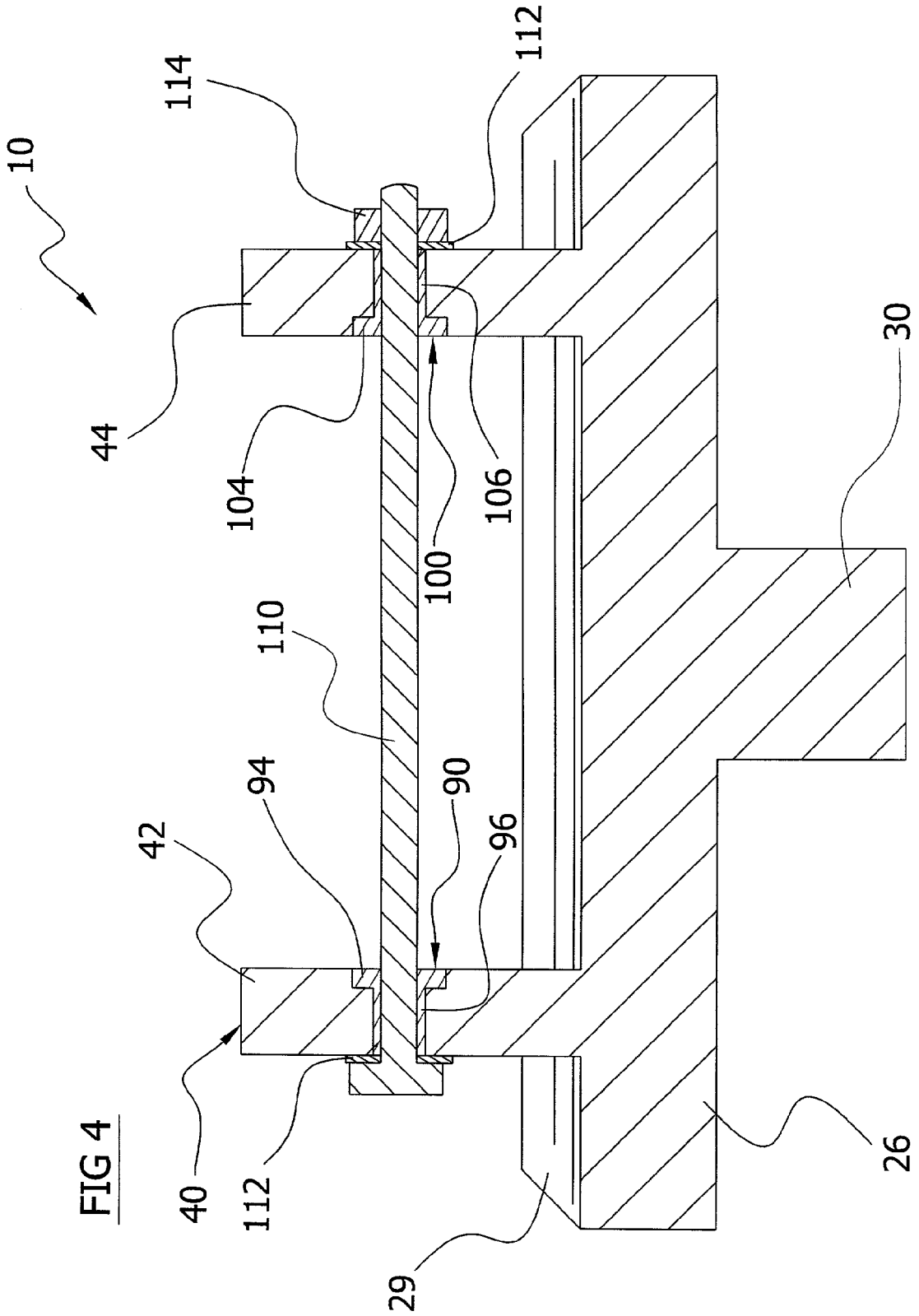


FIG 7

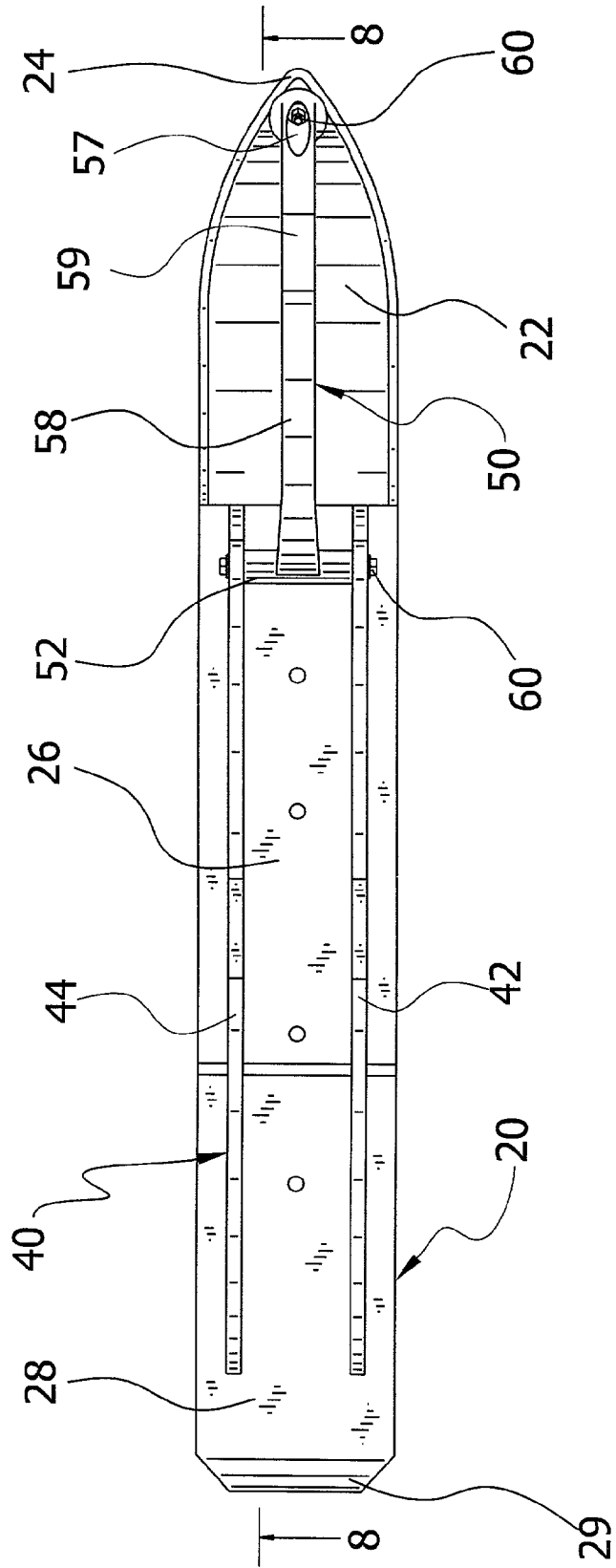


FIG 8

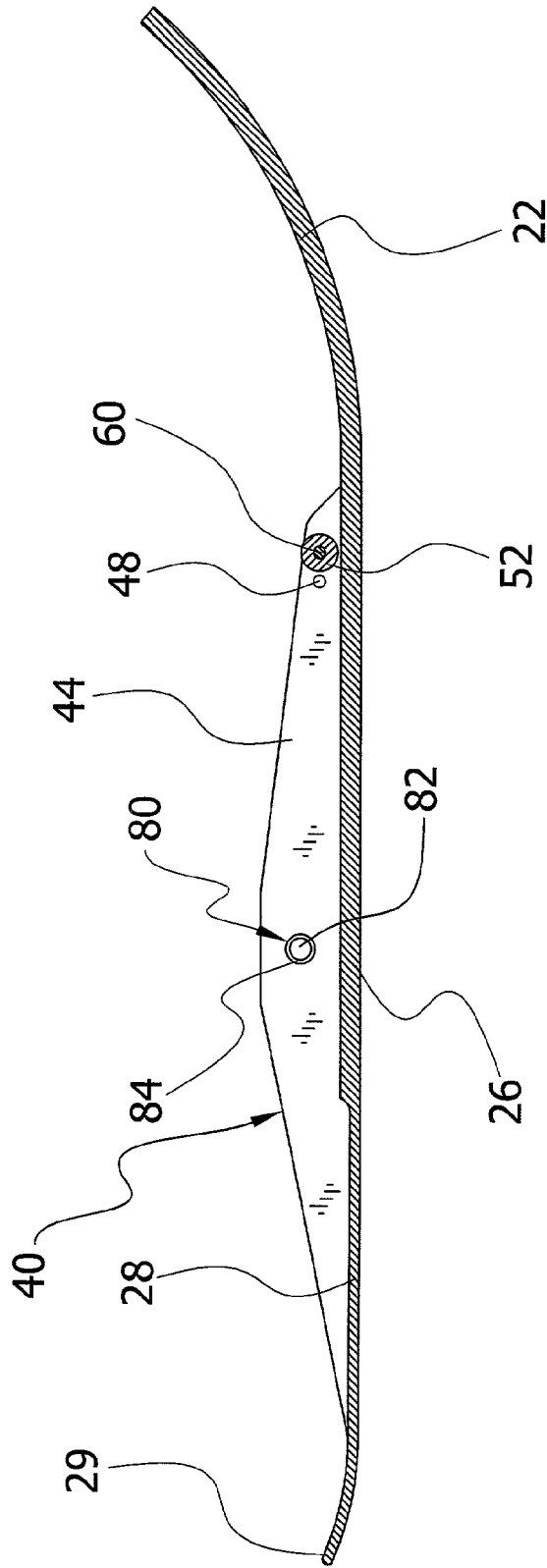


FIG 10

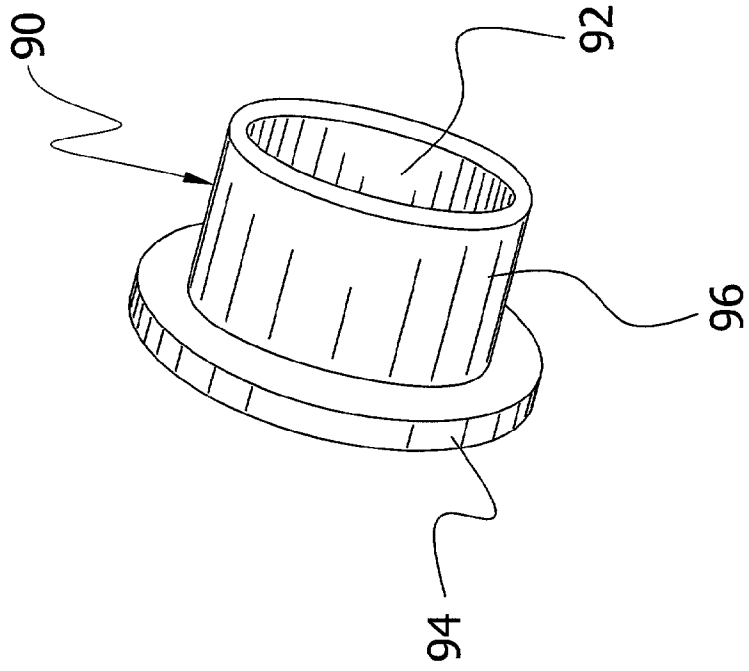


FIG 9

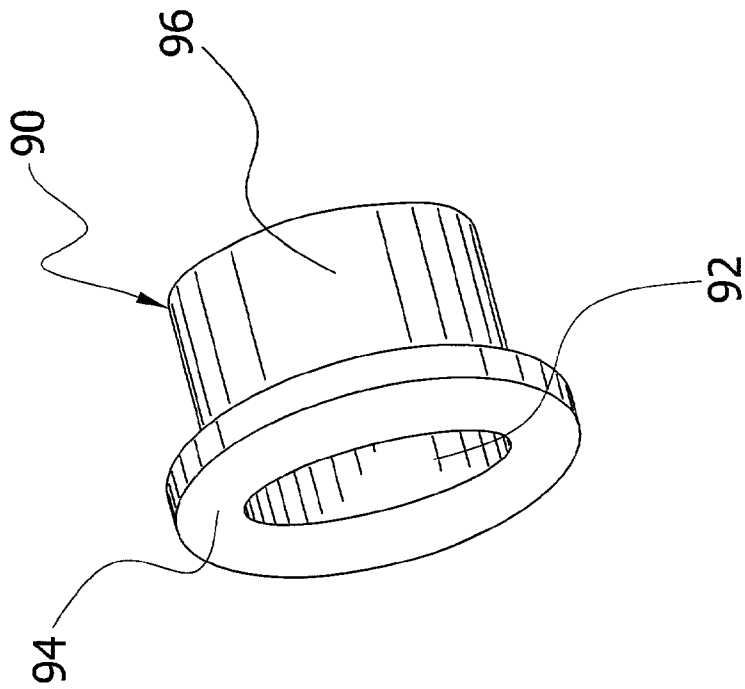


FIG 11

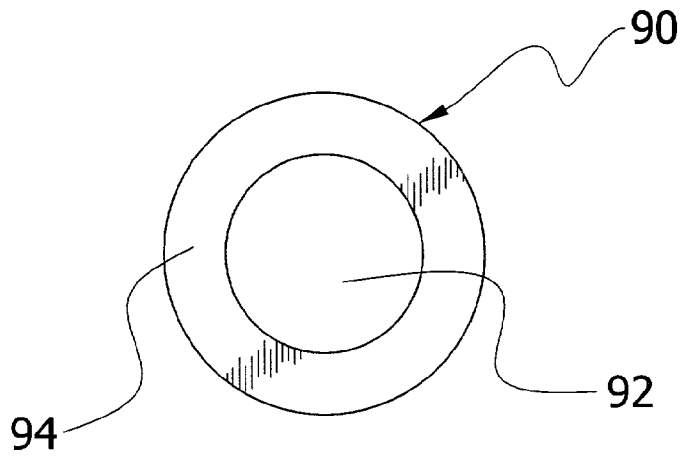


FIG 12

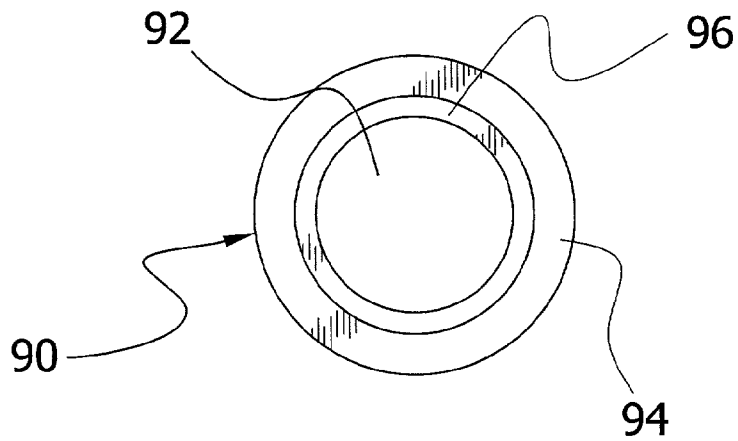
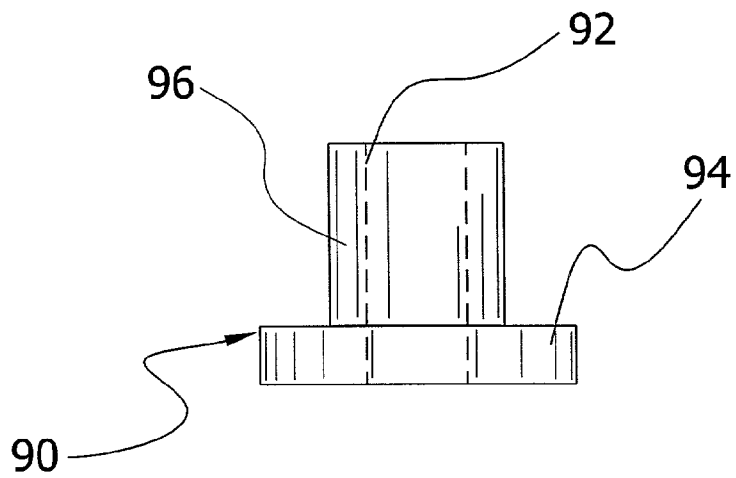


FIG 13



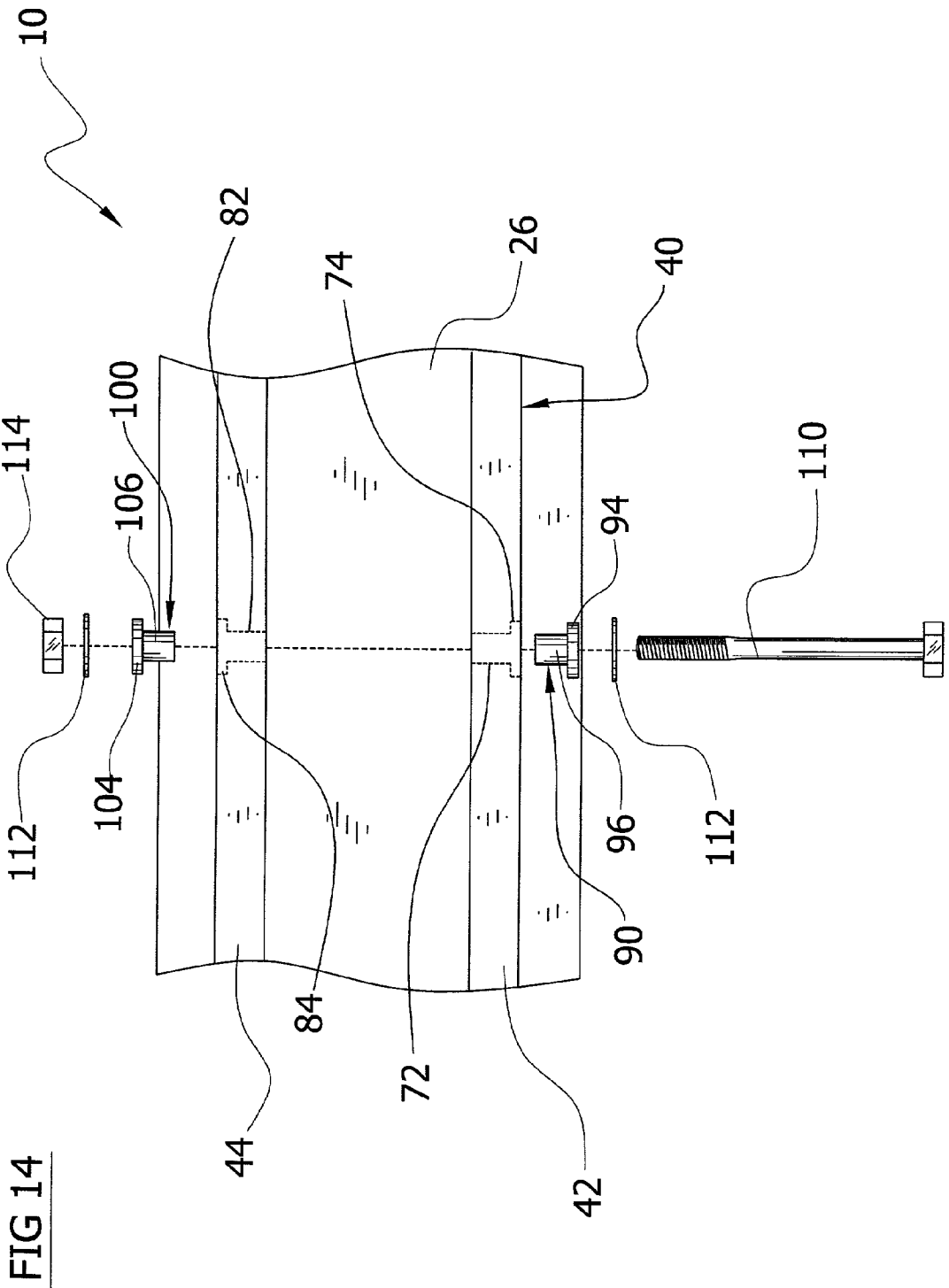


FIG 16

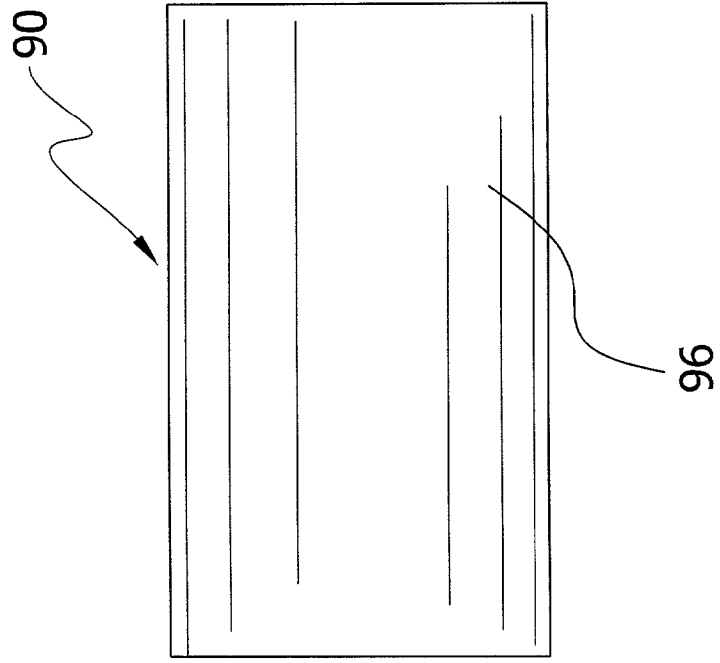
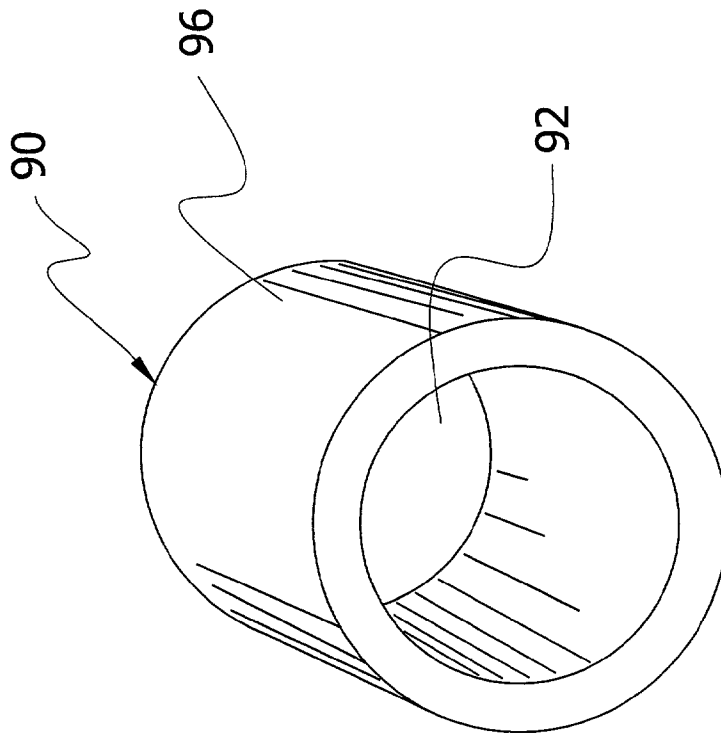


FIG 15



FLEXIBLE SKI SUPPORT SYSTEM**CROSS-REFERENCE TO RELATED U.S.
PATENT APPLICATION**

[0001] I hereby claim benefit under Title 35, United States Code, Section 120 of U.S. patent applications Ser. No. 09/130,892 filed Aug. 7, 1998 and Ser. No. 09/935,080 filed on Aug. 21, 2001. This application is a continuation-in-part of the 09/130,892 and 09/935,080 applications. The 09/130,892 and 09/935,080 applications are currently pending. The 09/130,892 and 09/935,080 applications are hereby incorporated by reference into this patent application.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates generally to support and attachment devices for skis for use upon snowmobiles and like vehicles that operate upon snow, and more specifically it relates to a flexible ski support system for increasing the overall flexibility of a snowmobile ski through the elimination of a metal saddle.

[0004] 2. Description of the Prior Art

[0005] Skis for snowmobiles and like vehicles have been in use for years. A snowmobile or like vehicle typically is comprised of a frame, a track within the rear portion of the vehicle, and a pair of skis controllably attached to a steering structure of the vehicle. Skis are utilized for supporting and steering the vehicle during operation upon snow and other surfaces.

[0006] Recently, skis for snowmobiles and like vehicles have been constructed of a combination metal and resilient plastic, such as ultra high molecular weight (UHMW) polyethylene, which allows for increased flexibility of the ski when encountering obstacles. The main body of the ski is comprised of a plastic material typically manufactured utilizing injection molding or blow molding wherein the rear portion to middle portion is molded relatively straight with the front portion molded to possess the desired curvature without stress existing within the front portion. A rigid metal "saddle" is attached to the middle portion of the plastic ski for allowing attachment of the ski to the front suspension of the snowmobile. A connecting pin is attached between the front suspension of the snowmobile and the metal saddle. A loop member, typically constructed of plastic, is attached to the front end of the ski and then to the middle portion of the ski with no stress contained within the front portion thereof.

[0007] The main problem with conventional plastic skis is that they utilize a rigid metal saddle that extends along a middle portion of the body of the ski a finite distance at the central flexing point of the ski thereby significantly reducing the ability of the ski to flex when encountering obstacles. Because the rigid metal saddle is positioned at the central flexing point of the ski, the front and rear portions of the ski must receive a significant portion of the flexing action of the ski during operation of the snowmobile. As is well known, when portions of the plastic ski are placed at greater stress, it becomes increasingly difficult to further bend/flex the ski thereby providing a "rougher" ride for the snowmobile rider.

[0008] In these respects, the flexible ski support system according to the present invention substantially departs from

the conventional concepts and designs of the prior art, and in so doing provides an apparatus primarily developed for the purpose of increasing the overall flexibility of a snowmobile ski.

SUMMARY OF THE INVENTION

[0009] In view of the foregoing disadvantages inherent in the known types of skis now present in the prior art, the present invention provides a new flexible ski support system wherein the same can be utilized for increasing the overall flexibility of a snowmobile ski through the elimination of a metal saddle.

[0010] The general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new flexible ski support system that has many of the advantages of the skis mentioned heretofore and many novel features that result in a new flexible ski support system which is not anticipated, rendered obvious, suggested, or even implied by any of the prior art, either alone or in any combination thereof.

[0011] To attain this, the present invention generally comprises a ski having an elongate body and a support portion having a first member and a second member, a first aperture extending within the first member, a second aperture extending within the second member, a first bushing member positioned within the first aperture, and a second bushing member positioned within the second aperture. The elongate body and the support portion are both molded into a one-piece structure from a relatively highly flexible material such as plastic. The bushing members each have a concentric bore for receiving a connecting pin for allowing attachment to a suspension arm of a snowmobile. The bushing members distribute the vertical and horizontal forces over a relatively broad area within the support portion thereby preventing damage or breakage to the support portion.

[0012] There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and that will form the subject matter of the claims appended hereto.

[0013] In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of the description and should not be regarded as limiting.

[0014] A primary object of the present invention is to provide a flexible ski support system that will overcome the shortcomings of the prior art devices.

[0015] A second object is to provide a flexible ski support system for increasing the overall flexibility of a snowmobile ski through the elimination of a metal saddle.

[0016] Another object is to provide a flexible ski support system that allows the entire body of the snowmobile ski to freely flex during operation.

[0017] An additional object is to provide a flexible ski support system that increases the overall performance of the ski in a variety of conditions.

[0018] A further object is to provide a flexible ski support system that eliminates the requirement and usage of a rigid metal saddle upon a snowmobile ski.

[0019] A further object is to provide a flexible ski support system that reduces stresses commonly applied at locations in front and behind a rigid metal saddle within a conventional snowmobile ski.

[0020] Other objects and advantages of the present invention will become obvious to the reader and it is intended that these objects and advantages are within the scope of the present invention.

[0021] To the accomplishment of the above and related objects, this invention may be embodied in the form illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that changes may be made in the specific construction illustrated and described within the scope of the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] Various other objects, features and attendant advantages of the present invention will become fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views, and wherein:

[0023] FIG. 1 is an upper perspective view of the present invention illustrating the connection of the snowmobile suspension arm to the ski without the usage of a rigid metal saddle.

[0024] FIG. 2 is a magnified exploded upper perspective view of the present invention.

[0025] FIG. 3 is a magnified top view of the present invention with the connecting pin securely positioned within.

[0026] FIG. 4 is a cross sectional view taken along line 4-4 of FIG. 3 illustrating the first and second bushings within the support portion of the ski.

[0027] FIG. 5 is an exploded top view of the present invention.

[0028] FIG. 6 is a cross sectional view taken along line 6-6 of FIG. 5.

[0029] FIG. 7 is a top view of the present invention illustrating the non-usage of a metal saddle.

[0030] FIG. 8 is a cross sectional view taken along line 8-8 of FIG. 7.

[0031] FIG. 9 is an outer perspective view of a bushing member.

[0032] FIG. 10 is an inner perspective view of a bushing member.

[0033] FIG. 11 is an end view of the bushing member from the flanged side.

[0034] FIG. 12 is an end view of the bushing member from the main body side.

[0035] FIG. 13 is a side view of the bushing member.

[0036] FIG. 14 is an exploded top view of another arrangement of the bushing members wherein the bushing members extend into the support portion of the ski from the outside.

[0037] FIG. 15 is an upper perspective view of an alternative embodiment of the bushing members without a flanged portion.

[0038] FIG. 16 is a side view of the alternative embodiment of the bushing members.

DESCRIPTION OF THE PREFERRED EMBODIMENT

A. Overview

[0039] Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, FIGS. 1 through 16 illustrate a flexible ski support system 10, which basically comprises a ski having an elongate body 20 and a support portion 40 having a first member and a second member, a first aperture 70 extending within the first member, a second aperture 80 extending within the second member, a first bushing member 90 positioned within the first aperture 70, and a second bushing member 100 positioned within the second aperture 80. The elongate body 20 and the support portion 40 are both molded into a one-piece structure from a relatively highly flexible material such as plastic. The bushing members each have a concentric bore 92, 102 for receiving a connecting pin 110 for allowing attachment to a suspension arm 12 of a snowmobile. The bushing members distribute the vertical and horizontal forces over a relatively broad area within the support portion 40 thereby preventing damage or breakage to the support portion 40.

B. Elongate Body

[0040] The elongate body 20 is preferably comprised of a resilient and flexible material such as but not limited to ultra high molecular weight (UHMW) polyethylene. It can be appreciated that various other types of resilient and flexible materials may be utilized to construct the elongate body 20. Furthermore, the elongate body 20 may be created utilizing various molding processes such as but not limited to injection molding. Once the elongate body 20 has solidified, the elongate body 20 is removed from the respective mold by various conventional removal means.

[0041] As further shown in FIGS. 1, 7 and 8 of the drawings, the elongate body 20 is basically comprised of a front portion 22 having a front end 24, a middle portion 26 and a rear portion 28 having a rear end 29. The rear portion 28, middle portion 26 and the front portion 22 define a substantially straight structure having a longitudinal axis extending from the rear portion 28 to the middle portion 26 of the elongate body 20, wherein the longitudinal axis is parallel to the upper surface of the middle portion 26 of the elongate body 20. The elongate body 20 has a generally flat structure except for the support portion 40 and the keel member 30 as best illustrated in FIGS. 4 and 6 of the drawings. It can be appreciated that the elongate body 20

may have various shapes other than a flat shape that is able to act as a ski. The elongate body **20** has an upper surface and a lower surface which are substantially parallel to one another which may have a varying or consistent thickness throughout. As shown in **FIG. 8** of the drawings, the rear end **29** of the rear portion **28** is preferably curved for allowing the elongate body **20** to move rearwardly without catching upon the surface. However, it can be appreciated that the rear end **29** may have various other shapes such as but not limited to straight and slanted. At least one keel member **30** preferably extends from a lower surface of the elongate body **20** that is utilized for increasing the steering abilities of the finalized product. The keel member **30** may extend from or near the rear end **29** to the front portion **22** of the elongate body **20**. The keel member **30** is preferably centered within the lower surface of the elongate body **20**, however it can be appreciated that various other locations upon the elongate body **20** may be utilized particularly if multiple keel members **30** are utilized. The keel member **30** is preferably parallel to the longitudinal axis of the elongate body **20**. The keel member **30** is preferably molded within the elongate body **20**, however the keel member **30** may be removably attached thereto. In addition, the keel member **30** is preferably formed for receiving a wear rod member (not shown) commonly utilized upon snowmobile skis and the like for reducing wear upon the keel member **30** and the elongate body **20** during usage.

[**0042**] As shown in **FIGS. 1 and 2** of the drawings, a support portion **40** extends upwardly from the upper surface of the elongate body **20** and is preferably molded integral within the elongate body **20**. The support portion **40** is also comprised of the same material as the elongate body **20** or material having similar physical properties for allowing flexing thereof.

[**0043**] The support portion **40** extends from the middle portion **26** of the elongate body **20** thereby substantially defining the middle portion of the elongate body **20** with the front portion **22** and the rear portion **28** on opposing ends of the support portion **40**. The middle portion **26** may extend a finite distance past the distal ends of the support portion **40** as can be appreciated. The boundaries of the middle portion **26** therefore should not be limited to the area of the elongate body **20** supporting the support portion **40**. It should be noted that the terminology front portion **22**, middle portion **26** and rear portion **28** are merely utilized to illustrate the present invention and should not limit the scope of the invention.

[**0044**] The support portion **40** is preferably comprised of a first portion **42** and a second portion **44** extending substantially parallel to one another in a distally spaced relationship as is best illustrated in **FIG. 7** of the drawings. The first portion **42** and the second portion **44** are preferably substantially traverse to the upper surface of the elongate body **20** as shown in **FIGS. 4 and 6** of the drawings. The first portion **42** and the second portion **44** each have a defined width that may be consistent or non-consistent through the entire length of the support portion **40**. In addition, the first portion **42** and the second portion **44** each have an inner surface and an outer surface as further shown in the figures. The support portion **40** may have various shapes and structures other than that illustrated within the drawings.

[**0045**] At least one pair of receiving apertures **48** extend through the support portion **40** in opposition to one another adjacent the front portion **22** of the elongate body **20** as further shown in **FIGS. 1 and 8** of the drawings. More than one pair of receiving apertures **48** is preferably utilized for allowing for the adjustment of the preload member **50**. The receiving apertures **48** are formed for receiving at least one fastener **60** extending through the preload member **50** for securing the preload member **50** to the middle portion **26** of the elongate body **20**. It can be appreciated that various other connection means may be utilized to secure the preload member **50** to the middle portion **26** of the elongate body **20** and the illustration of the receiving apertures **48** should not limit the scope of the invention. For example, the preload member **50** may be attached nonmovably or movably to the middle portion **26** of the elongate body **20** without being attached directly to the support portion **40**.

C. Bushing Apertures

[**0046**] As shown in **FIGS. 5, 6 and 14** of the drawings, a first aperture **70** extends within the first portion **72, 82** from the inner surface to the outer surface thereof. The first aperture **70** extends completely through the first portion **42** of the support portion **40** as best shown in **FIG. 6** of the drawings.

[**0047**] As shown in **FIGS. 5, 6 and 14** of the drawings, a second aperture **80** extends within the second portion **44** from the inner surface to the outer surface thereof. The second aperture **80** extends completely through the second portion **44** of the support portion **40** as best shown in **FIG. 6** of the drawings. The second aperture **80** is preferably concentric with the first aperture **70** as shown in **FIGS. 5 and 14** of the drawings. The second aperture **80** preferably has the same inner diameter as the first aperture **70**.

[**0048**] The apertures **70, 80** may be formed within the support portion **40** by various means such as but not limited to by drilling into the support portion **40** with a drill bit. The apertures **70, 80** may also be directly formed within the support portion **40** during the molding process.

[**0049**] As shown in **FIGS. 5, 6 and 14** of the drawings, the first aperture **70** and the second aperture **80** preferably each have a first portion **72** having a first width and a second portion **74, 84** having a second width wherein the second width is larger than the first width. The second portion **74, 84** of the apertures **70, 80** extends a finite distance into the support portion **40** concentric with the first portion **42** thereof as best shown in **FIGS. 5, 6 and 14** of the drawings. **FIGS. 5 and 6** illustrate the second portion **74, 84** as extending into the inner surface of the first portion **42** and the second portion **44** of the support portion **40**. **FIG. 14** illustrates the second portion **74, 84** extending into the outer surface of the first portion **42** and the second portion **44** of the support portion **40**. It can be appreciated that the second portion **74, 84** may extend into both the inner surface and the outer surface of the respective portions **42, 44** thereby allowing two bushing members to be attached to each of the respective portions **42, 44**. The second portion **74, 84** of the apertures **70, 80** is preferably similar in shape to the first portion **72, 82** of the apertures **70, 80**, however differing shapes may be utilized to construct the second portion **74, 84**.

[**0050**] The first aperture **70** and the second aperture **80** are preferably comprised of a circular shape. However, various

other shapes may be utilized to construct the apertures **70, 80** such as but not limited to rectangular, square, triangular, oval, hexagonal, conical, tapered and various other well-known shapes. In addition, grooves and various other structures may extend into the apertures **70, 80** for various reasons.

D. Bushing Members

[0051] As shown in **FIG. 4** of the drawings, a first bushing member **90** is positioned within the first aperture **70**, and a second bushing member **100** is positioned within the second aperture **80**. It can be appreciated that the bushing members **90, 100** are preferably formed snugly fitting within the apertures **70, 80** respectively. The bushing members **90, 100** are preferably comprised of a rigid material such as but not limited to metal.

[0052] As shown in **FIGS. 4, 5, 6** and **14** of the drawings, the first bushing member **90** and the second bushing member **100** each have a first segment **96, 106** corresponding to the first portion **72, 82, 42**. The first bushing member **90** and the second bushing member **100** each have a second segment **94, 104** corresponding to the second portion **74, 84** of the apertures. The first segment **96, 106** preferably extends completely through the first portion **72, 82** of the respective aperture **70, 80** in a flush manner, however the first segment **96, 106** may be recessed or extend outwardly from the first portion **42** or second portion **44**. **FIGS. 9 through 13** illustrate the structure of the first bushing member **90** which is similar to the structure of the second bushing member **100**. As shown in **FIGS. 9, 10** and **13** of the drawings, the second segment **94, 104** is a flanged portion that extends outwardly in a substantially radial manner from the first segment **96, 106**. It can be appreciated that the second segment **94, 104** may have various other shapes and structures to accomplish a similar structure.

[0053] As shown in **FIGS. 6, 9, 10, 11, 12** and **13** of the drawings, each of the bushing members **90, 100** has a bore **92, 102** concentrically positioned within for receiving a connecting pin **110**. The bore **92, 102** allows the connecting pin **110** to extend through the bushing members **90, 100** in a relatively tight manner as best shown in **FIG. 4** of the drawings. The connecting pin **110** extends through a coupler within a suspension arm **12** upon the front suspension of the vehicle thereby connecting the ski to the vehicle in a pivotal manner. As is well known in the art, the connecting pin **110** may have a threaded portion for receiving a mount nut **114** or other connection apparatus for securing upon a suspension arm **12**. One or more washers **112** and mount nuts **114** may also be utilized in further securing the ski to the suspension arm **12** of the vehicle.

[0054] As illustrated within the figures, the second segment **94, 104** of the first bushing member **90** is positioned relatively opposite the second segment **94, 104** of the second bushing member **100** and the first segment **96, 106** of the first bushing member **90** is positioned relatively opposite the first segment **96, 106** of the second bushing member **100**. However, it can be appreciated that the bushing members **90, 100** may be aligned in a similar manner with one another not illustrated within the figures.

[0055] As shown in **FIGS. 3 and 4** of the drawings, the second segment **94, 104** of the bushing members is preferably substantially flush with a surface of the first portion **42**

and the second portion **44**. However, the second segment **94, 104** of the bushing members **90, 100** may extend past a surface of the first portion **42** and the second portion **44**.

[0056] As shown in **FIGS. 15 and 16** of the drawings, the bushing members **90, 100** may have a consistent circular structure without the second segment **94, 104** extending from thereof. The apertures **70, 80** would have a similar consistent inner diameter for receiving the bushing members **90, 100** as shown in **FIGS. 15 and 16** of the drawings. It can be appreciated that the bushing members **90, 100** may have various shapes and structures that can be positioned within an aperture **70, 80** such as but not limited to conical, tapered, square, triangular, rectangular and hexagonal.

[0057] As to a further discussion of the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided. Although the present invention has been described in considerable detail with reference to certain preferred versions thereof, other versions are possible. It should also be stated at this point that although this invention is described in the context of a snowmobile, this invention would be equally useful on airplane skis, BOMBARDIERS, SNO-SCOOTS, and other similar vehicles.

[0058] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed to be within the expertise of those skilled in the art, and all equivalent structural variations and relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0059] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

Index of Elements for Flexible Ski Support System

- 10. Flexible Ski Support System
- 11.
- 12. Suspension Arm
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20. Elongate Body
- 21.
- 22. Front Portion
- 21
- 23.
- 24. Front End
- 25. Front Aperture
- 26. Middle Portion
- 27.
- 28. Rear Portion

-continued

Index of Elements for Flexible Ski Support System

- 29. Rear End
- 30. Keel Member
- 31.
- 32.
- 33.
- 34.
- 35.
- 36.
- 37.
- 38.
- 39.
- 40. Support Portion
- 41.
- 42. First Portion
- 43.
- 44. Second Portion
- 45.
- 46. Main Aperture
- 47.
- 48. Receiving Apertures
- 49.
- 50. Preload Member
- 51.
- 52. First End
- 53.
- 54.
- 55.
- 56. Second End
- 57. Second Opening
- 58. First Segment
- 59. Second Segment
- 60. Fastener
- 61.
- 62.
- 63.
- 64.
- 65.
- 66.
- 67.
- 68.
- 69.
- 70. First Aperture
- 71.
- 72. First Portion
- 73.
- 74. Second Portion
- 75.
- 76.
- 77.
- 78.
- 79.
- 80. Second Aperture
- 81.
- 82. First Portion
- 83.
- 84. Second Portion
- 85.
- 86.
- 87.
- 88.
- 89.
- 90. First Bushing Member
- 91.
- 92. Bore
- 93.
- 94. Second Segment
- 95.
- 96. First Segment
- 97.
- 98.
- 99.
- 100. Second Bushing Member
- 101.
- 102. Bore

-continued

Index of Elements for Flexible Ski Support System

- 103.
- 104. Second Segment
- 105.
- 106. First Segment
- 107.
- 108.
- 109.
- 110. Connecting Pin
- 111.
- 112. Washer
- 113.
- 114. Mount Nut
- 115.
- 116.
- 117.
- 118.
- 119.

I claim:

1. A flexible ski for use on a vehicle, said ski comprising:
 - a molded one piece flexible elongate ski having an upper surface, a bottom surface, and a first portion and a second portion extending upwardly from said upper surface, said first portion and said second portion are spaced apart from each other;
 - a first aperture within said first portion;
 - a second aperture within said second portion concentric with said first aperture and opposite said first aperture;
 - a first bushing member positioned within said first aperture;
 - a second bushing member positioned within said second aperture; and
 wherein said first aperture and said second aperture each have a first portion having a first width and a second portion having a second width wherein said second width is larger than said first width, and wherein said first bushing member and said second bushing member each have a first segment corresponding to said first portion and a second segment corresponding to said second portion of said apertures, wherein said second segment of said first bushing member is positioned relatively opposite said second segment of said second bushing member and wherein said first segment of said first bushing member is positioned relatively opposite said first segment of said second bushing member.
2. The flexible ski for use on a vehicle of claim 1, wherein said flexible elongate ski is comprised of a flexible plastic material.
3. The flexible ski for use on a vehicle of claim 1, wherein said flexible elongate ski is comprised of ultra high molecular weight polyethylene.
4. The flexible ski for use on a vehicle of claim 1, wherein said second portion of said apertures is within an inside portion of said first portion and said second portion.
5. The flexible ski for use on a vehicle of claim 1, wherein said second portion of said apertures is within an outside portion of said first portion and said second portion.
6. The flexible ski for use on a vehicle of claim 1, wherein said first aperture and said second aperture have a circular

shape, and wherein said first bushing member and said second bushing member have an outer circular shape corresponding to said apertures.

7. The flexible ski for use on a vehicle of claim 1, wherein said first aperture and said second aperture have a rectangular shape, and wherein said first bushing member and said second bushing member have an outer rectangular shape corresponding to said apertures.

8. The flexible ski for use on a vehicle of claim 1, wherein said bushing members are comprised of a metal material.

9. The flexible ski for use on a vehicle of claim 1, wherein said second segment of said bushing members is substantially flush with a surface of said first portion and said second portion.

10. The flexible ski for use on a vehicle of claim 1, wherein said second segment of said bushing members extends past a surface of said first portion and said second portion.

11. A flexible ski for use on a vehicle, said ski comprising:

a molded one piece flexible elongate ski having an upper surface, a bottom surface, and a first portion and a second portion extending upwardly from said upper surface, said first portion and said second portion are spaced apart from each other;

a first aperture within said first portion having a first inner diameter;

a second aperture within said second portion having a second inner diameter, wherein said second aperture is concentric with said first aperture and opposite said first aperture;

a first bushing member having a first outer diameter positioned within said first aperture; and

a second bushing member having a second outer diameter positioned within said second aperture.

12. The flexible ski for use on a vehicle of claim 11, wherein said flexible elongate ski is comprised of a flexible plastic material.

13. The flexible ski for use on a vehicle of claim 11, wherein said flexible elongate ski is comprised of ultra high molecular weight polyethylene.

14. The flexible ski for use on a vehicle of claim 11, wherein said first inner diameter is equal to said second inner diameter.

15. The flexible ski for use on a vehicle of claim 11, wherein said first outer diameter and said second outer diameter are approximately equal to said first inner diameter and said second inner diameter respectively thereby providing a relatively tight fit for said bushing members.

16. The flexible ski for use on a vehicle of claim 11, wherein said first aperture and said second aperture have a circular shape, and wherein said first bushing member and said second bushing member have an outer circular shape corresponding to said apertures.

17. The flexible ski for use on a vehicle of claim 11, wherein said first aperture and said second aperture have a rectangular shape, and wherein said first bushing member and said second bushing member have an outer rectangular shape corresponding to said apertures.

18. The flexible ski for use on a vehicle of claim 11, wherein said bushing members are comprised of a metal material.

19. The flexible ski for use on a vehicle of claim 11, wherein the distal ends of said bushing members are substantially flush with a surface of said first portion and said second portion.

20. The flexible ski for use on a vehicle of claim 11, wherein the distal ends of said bushing members extend past a surface of said first portion and said second portion.

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