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SEATING ASSEMBLY HAVING LOWER LEG SUPPORT

Abstract

A seating assembly includes a seat frame, a seat pan coupled with the seat frame, a leg extension assembly coupled with the seat pan, and a calf support assembly disposed under the leg extension assembly and translatable relative to the seat pan. The calf support assembly includes a calf support rotatable about a rotation axis. The rotation axis is translatable relative to the seat pan.

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Background/Summary

FIELD OF THE DISCLOSURE

[0001] The present disclosure generally relates to a vehicle seating assembly and, more particularly, to a vehicle seating assembly that includes an adjustable lower leg support assembly.

BACKGROUND OF THE DISCLOSURE

[0002] Conventional vehicle seating can include a set base, a seat back, and a leg support supporting a user's legs. An enhanced support arrangement for the legs of a user is desired.

SUMMARY OF THE DISCLOSURE

[0003] According to a first aspect of the present disclosure, a seating assembly includes a seat frame, a seat pan coupled with the seat frame, a leg extension assembly coupled with the seat pan, and a calf support assembly disposed under the leg extension assembly and translatable relative to the seat pan. The calf support assembly includes a calf support rotatable about a rotation axis. The rotation axis is translatable relative to the seat pan.

[0004] Embodiments of the first aspect of the present disclosure can include any one or a combination of the following features: [0005] the calf support assembly includes at least one guide sleeve coupled to one of the seat pan and the leg extension assembly and at least one rod coupled to the calf support and slidable through the guide sleeve; [0006] a motor operably coupled with the at least one rod and configured to move the at least one rod through the at least one guide sleeve to translate the calf support; [0007] the motor is configured to translate the rotation axis relative to the leg extension assembly; [0008] one rod includes a first rod disposed adjacent one side of the seating assembly and configured to engage the first guide sleeve of the at least one guide sleeve and a second rod disposed adjacent an opposing side of the seating assembly and configured to a second guide sleeve of the at least one guide sleeve; [0009] a crossmember extending laterally between the first rod and the second rod; [0010] the motor is disposed centrally between the first rod and the second rod; [0011] a mount extending substantially parallel to the crossmember between the first and second guide sleeves; [0012] the motor is disposed in the mount; [0013] the mount is coupled to an underside of the leg extension assembly; [0014] an actuator disposed in the calf support and configured to drive rotation of the calf support about the rotation axis; and [0015] a motor configured to translate the leg extension assembly in a fore-aft direction independent of translation of the rotation axis.

[0016] According to a second aspect of the present disclosure, a seating assembly includes a seat frame, a seat pan coupled with the seat frame, a leg extension assembly coupled with the seat pan, a calf support operably coupled with the seat pan and pivotable about a rotation axis, and a guide sleeve disposed under the seat pan configured to receive a rod coupled with the calf support. The rod is slidable within the guide sleeve to allow translation of the rotation axis.

[0017] Embodiments of the second aspect of the present disclosure can include any one or a combination of the following features: [0018] a motor operably coupled with the rod and configured to move the rod through the guide sleeve to translate the calf support; [0019] a mount coupled to the seat pan, wherein the guide sleeve is coupled with the mount; [0020] the motor is disposed in the mount; [0021] the motor is configured to translate the rotation axis relative to the leg extension assembly; [0022] an actuator disposed in the calf support and configured to drive rotation of the calf support about the rotation axis; and [0023] a motor configured to translate the leg extension assembly in a fore-aft direction independent of translation of the rotation axis.

[0024] According to a third aspect of the present disclosure, a seating assembly includes a seat frame, a seat pan coupled with the seat frame, a leg extension assembly coupled with the seat pan, and a calf support assembly disposed under the seat pan. The calf support assembly includes a first guide sleeve disposed adjacent one side of the seating assembly, a second guide sleeve disposed adjacent an opposing side of the seating assembly, a first rod slidably disposed in the first guide sleeve, a second rod slidably disposed in the second guide sleeve, and a calf support coupled with the first and second rods and translatable relative to the seat pan. The seating assembly includes an actuator operably coupled with the first and second rods and is configured to move the first and second rods through the first and second guide sleeve to translate the calf support.

[0025] These and other features, advantages, and objects of the present disclosure will be further

understood and appreciated by those skilled in the art by reference to the following specification, claims, and appended drawings.

Description

BRIEF DESCRIPTION OF THE DRAWINGS
[0026] In the drawings:
[0027] FIG. **1** is a perspective view of a seating assembly disposed in a vehicle;
[0028] FIG. **2** is a partially-exploded perspective view of the seating assembly of FIG. **1** showing a seat subassembly and a seat frame of the seating assembly;
[0029] FIG. **3** is a top plan view of the seat subassembly of FIG. **2**;
[0030] FIG. **4** is a bottom plan view of the seat subassembly of FIG. **3** with a lower leg support of the seat subassembly in a fully deployed position;
[0031] FIG. **5** is a bottom plan view of the seat subassembly of FIGS. **3** and **4** with the lower leg support in a fully undeployed position;
[0032] FIG. **6**A is a side plan view of the seat subassembly of FIG. **3** with the lower leg support in an aft, partially-deployed position and the upper leg support in a rearward position;
[0033] FIG. **6**B is a side plan view of the seat subassembly of FIG. **3** with the lower leg support in an aft, fully-deployed position and the upper leg support in a forward position;
[0034] FIG. **6**C is a side plan view of the seat subassembly of FIG. **3** with the lower leg support in a fore, fully-deployed position and the upper leg support in the forward position; and
[0035] FIG. **6**D is a side plan view of the seat subassembly of FIG. **3** with the lower leg support in a fore, undeployed position and the upper leg support in a rearward position.
DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS
[0036] Reference will now be made in detail to the present preferred embodiments of the disclosure, examples of which are illustrated in the accompanying drawings. Wherever possible, the same reference numerals will be used throughout the drawings to refer to the same or like parts. In the drawings, the depicted structural elements may or may not be to scale and certain components may or may not be enlarged relative to the other components for purposes of emphasis and understanding.
[0037] For purposes of description herein, the terms “upper,” “lower,” “right,” “left,” “rear,” “front,” “vertical,” “horizontal,” and derivatives thereof shall relate to the concepts as oriented in FIG. **1**. However, it is to be understood that the concepts may assume various alternative orientations, except where expressly specified to the contrary. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, specific dimensions and other physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.
[0038] The present illustrated embodiments reside primarily in combinations of method steps and apparatus components related to a seating assembly having lower leg support. Accordingly, the apparatus components and method steps have been represented, where appropriate, by conventional symbols in the drawings, showing only those specific details that are pertinent to understanding the embodiments of the present disclosure so as not to obscure the disclosure with details that will be readily apparent to those of ordinary skill in the art having the benefit of the description herein. Further, like numerals in the description and drawings represent like elements.
[0039] As used herein, the term “and/or,” when used in a list of two or more items, means that any one of the listed items can be employed by itself, or any combination of two or more of the listed items, can be employed. For example, if a composition is described as containing components A, B, and/or C, the composition can contain A alone; B alone; C alone; A and B in combination; A and

C in combination; B and C in combination; or A, B, and C in combination.
[0040] In this document, relational terms, such as first and second, top and bottom, and the like, are used solely to distinguish one entity or action from another entity or action, without necessarily requiring or implying any actual such relationship or order between such entities or actions. The terms “comprises,” “comprising,” or any other variation thereof, are intended to cover a non-exclusive inclusion, such that a process, method, article, or apparatus that comprises a list of elements does not include only those elements but may include other elements not expressly listed or inherent to such process, method, article, or apparatus. An element preceded by “comprises . . . a” does not, without more constraints, preclude the existence of additional identical elements in the process, method, article, or apparatus that comprises the element.
[0041] As used herein, the term “about” means that amounts, sizes, formulations, parameters, and other quantities and characteristics are not and need not be exact, but may be approximate and/or larger or smaller, as desired, reflecting tolerances, conversion factors, rounding off, measurement error and the like, and other factors known to those of skill in the art. When the term “about” is used in describing a value or an end-point of a range, the disclosure should be understood to include the specific value or end-point referred to. Whether or not a numerical value or end-point of a range in the specification recites “about,” the numerical value or end-point of a range is intended to include two embodiments: one modified by “about,” and one not modified by “about.” It will be further understood that the end-points of each of the ranges are significant both in relation to the other end-point, and independently of the other end-point.
[0042] The terms “substantial,” “substantially,” and variations thereof as used herein are intended to note that a described feature is equal or approximately equal to a value or description. For example, a “substantially planar” surface is intended to denote a surface that is planar or approximately planar. Moreover, “substantially” is intended to denote that two values are equal or approximately equal. In some embodiments, “substantially” may denote values within about 10% of each other, such as within about 5% of each other, or within about 2% of each other.
[0043] As used herein the terms “the,” “a,” or “an,” mean “at least one,” and should not be limited to “only one” unless explicitly indicated to the contrary. Thus, for example, reference to “a component” includes embodiments having two or more such components unless the context clearly indicates otherwise.
[0044] Referring generally to FIGS. **1**-**6**D, reference numeral **10** generally designates a seating assembly **10**. The seating assembly **10** includes a seat frame **12** and a seat pan **14** coupled with the seat frame **12**. A leg extension assembly **16**, otherwise referred to herein as a first support assembly **16**, or upper support assembly **16**, is coupled with the seat pan **14**. A calf support assembly **18**, otherwise referred to herein as a second support assembly **18**, or lower support assembly **18**, is disposed under the leg extension assembly and is translatable relative to the seat pan **14**. The calf support assembly **18** includes a calf support **20** rotatable about a rotation axis **22**. The rotation axis **22** is translatable relative to the seat pan **14**.
[0045] In general, the present arrangement of the seating assembly **10** may provide for enhanced spacing between the seating assembly **10** and a floor **24** of a vehicle **26** to allow deployment of the calf support assembly **18**. Further, the modular arrangement of the seat pan **14** with the calf support assembly **18** and the leg extension assembly may provide for enhanced room in the vehicle **26** in which the seating assembly **10** is arranged.
[0046] Referring to FIG. **1**, the seating assembly **10** may be positioned in a vehicle **26** and defines a front **28**, a rear **30**, a first side **32**, and a second side **34** opposing the first side **32**. The front-rear-side orientations may correspond to the features of a user sitting in the seat **38**, with sides **32**, **34** corresponding to arm positions (e.g., armrests), the front **28** referring to anterior relative to the frontal plane of the user, and the rear **30** referring to posterior relative to the frontal plane of a user. The seating assembly **10** is coupled with the vehicle **26** via the seat frame **12** which includes a pair of glide assemblies **36** secured to a floor **24** of the vehicle **26**. The seating assembly **10** includes a

seat **38** and a seat back **40** that supports a headrest **42** thereon. The seat back **40** is pivotally coupled with the seat **38**, such that the seat back **40** can be moved between upright and inclined positions. The seat **38** includes a seat base **44** and a seat extension **46** moveable relative to the seat base **44**. Although covered by seat extension **46** in FIG. **1**, the upper support assembly **16** may be operably coupled with the seat extension **46** and extend and retract the seat extension **46**. The lower support assembly **18** is disposed on an underside **48** of the seat pan **14** and includes the lower leg support **20** nested underneath the seat **38**. The lower support assembly **18** is moveable relative to the seat **38** to support lower legs of a user. In particular, the lower leg support **20** may be moved forward and rotated to support portions of the user's leg generally below the knee (e.g., calves, ankles).

[0047] Referring now to FIG. **2**, a seat subassembly **49** that includes the seat pan **14**, the upper support assembly **16**, and the lower support assembly **18** includes a spring assembly **50** positioned between the seat frame **12** and the seat base **44**. The spring assembly **50** is provided under upholstery and/or cushioning or other finishes of the seat **38** for supporting a user in the seat **38**. The seat pan **14** includes first and second wings **52**, **54** that extend from a body **56** of the seat pan **14** and are configured to support side cushions of a seat cushion over the seat base **44**. The seat cushion is supported above the spring assembly **50**.

[0048] The spring assembly **50** includes one or more clasps **58** disposed at the rear **30** of the seating assembly **10** and configured to engage with a brace **60** of the seat frame **12**. The seat pan **14** engages another brace **60** so that the seat subassembly **49** is supported from the floor **24** of the vehicle **26** by the seat frame **12**. The seat frame **12** also includes a pair of sleds **62** that engage the pair of glide assemblies **36** to allow forward-rearward translation of the seating assembly **10** relative to the floor **24**.

[0049] Still referring to FIG. **2**, the upper support assembly **16** includes an upper leg support **64** that includes a structure **66** that approximately spans a width of the seat subassembly **49**. A first actuation unit **68** is disposed between the upper leg support **64** and the body **56** of the seat pan **14** to provide translational movement of the upper support assembly **16** in a forward-rearward direction relative to the seat pan **14** and therefore, the seat base **44**. Because the structure **66** spans the width of the seat subassembly **49**, the upper support assembly **16** may be configured to move as one, or as a one-piece unit, between forward and rearward positions. In other words, one side of the upper support assembly **16** may not move independently relative to another side of the upper support assembly **16**. Accordingly, the first actuation unit **68** may be centrally disposed (e.g., along a lateral midline **70** of the seat subassembly **49**) to provide for balanced forward-rearward movement. In another example, the first actuation unit **68** includes a plurality of actuators distributed width-wise, with each configured to drive one side of the upper support assembly **16**.

[0050] The first actuation unit **68** can include any electromechanical actuators and/or gearing coupled with a first actuator **72** to allow the first actuator **72** to interact with the body **56** or the structure **66**. By way of example, the first actuator **72** may be a motor configured to drive a ball screw. The motor may be disposed in the body **56**. For example, a motor may be housed in a cavity defined by the body **56** disposed on the lateral midline **70**, and the ball screw may extend into the structure **66** whereby, upon rotation of the shaft of the motor, the ball screw drives the structure **66** forward or rearward. The motor and ball-screw arrangement is merely exemplary and non-limiting. Other mechanisms, such as pneumatic systems, pulley systems, or any other mechanical interface may be provided in the first actuation unit **68** to allow for manual and/or automatic translation of the upper support assembly **16** relative to the seat pan **14**.

[0051] Referring generally to FIG. **2-5**, the lower leg support **20** of the lower support assembly **18** includes a cushion, or bun **74**, having a generally elongated shape. Further, the bun **74** may define a crosssection having a length and depth that are substantially equal or unequal (e.g., a square crosssection). In the present example, the bun **74** has an oblong trapezoidal crosssection shape. The bun **74** has a first surface **76** and a second surface **78** separated by an edge **80** therebetween. The bun **74** is rotated in a fore-aft movement about the rotational axis **22** as will be described in relation

to FIGS. **6**A-**6**D, which modifies the orientations of the first and second surfaces **76**, **78** relative to the seat pan **14**. For example, in an aft position (FIGS. **6**A and **6**B), the first surface **76** faces forward and is presented substantially in view from the front **28** while the second surface **78** faces generally upwardly. In a fore position (FIGS. **2-5**, **6**C, and **6**D), the first surface **76** faces substantially forward and is presented in view while the second surface **78** faces generally upwardly. The second surface **78** is configured to support the lower leg of a user in the seating assembly **10**, such as in a reclined position of the seating assembly **10**. For example, the second surface **78** can engage the calves of a user to lift or otherwise suspend the user's feet from the floor **24**. It is contemplated that such reclining and/or suspension during use of the lower support assembly **18** may only be implemented when the vehicle **26** is stationary or otherwise not in use for travel or operation.

[0052] Referring generally to FIGS. **2-6**D, the lower support assembly **18** also includes a slide **84** under the seat pan **14** that couples with the lower leg support **20** to move the lower leg support **20** between a fully undeployed position (FIGS. **5** and **6**D) and a fully deployed position (FIGS. **4**, **6**B, and **6**C). A partially deployed position (FIG. **6**A) refers to any position between the undeployed and deployed position. The fully deployed and fully undeployed positions may refer to maximum strokes of the lower leg support **20**.

[0053] Referring more particularly to FIG. **4**, the slide **84** is disposed on the underside **48** of the seat pan **14**. The slide **84** includes a mount **86**, or anchorage, that is fixed with the seat pan **14** and extends laterally between the first side **32** and the second side **34**. A first guide sleeve **88** and a second guide sleeve **90** are operably coupled to the mount **86** adjacent the first and second sides **34**, respectively. First and second rods **92**, **94** are slidably disposed in the first and second guide sleeves **88**, **90** and are operably coupled together via a crossmember **96** extending therebetween the mount **86** extends substantially parallel with the cross member **96**. The crossmember **96** is fixed with the rods **92**, **94** adjacent a first end of each rod **92**, **94** such that the rods **92**, **94** move in the guide sleeves **88**, **90** in unison. While the crossmember **96** maintains alignment of the first and second rods **92**, **94** at the crossmember **96**, toward the front **28**, the rods **92**, **94** include curved portions **98** at second ends of each rod **92**, **94** that face one another and engage or pass into the lower leg support **20**, such that sliding movement of the rods **92**, **94** results in translation of the lower leg support **20**. It is contemplated that, though referred to as first and second rods **92**, **94**, the first and second rods **92**, **94** may be portions of a common, continuous linkage that extends through the bun **74** (FIG. **3**).

[0054] The slide **84** includes a second actuation unit **100** configured to drive the rods **92**, **94** through the guide sleeves **90**. The second actuation unit **100** includes a second actuator **102** that may comprise any of the mechanisms previously described with respect to the first actuator **72** but is exemplarily a motor mounted **86** beneath the seat pan **14**. For example, a base **104** may be provided on the mount **86** for supporting the second actuator **102**. A transmission arrangement **106** may be provided between the second actuator **102** and the crossmember **96**, such that when the second actuator **102** actuates, the transmission arrangement **106** transfers or translates the actuation into forward or rearward movement of the crossmember **96** and, therefore, the lower leg support **20**. For example, a ball screw or other transmission element may be provided to translate rotational motion into linear motion.

[0055] The second actuator **102** is located proximate to the lateral midline **70** to limit the slide **84** from “dresser-drawing.” For example, the second actuator **102** may drive the first and second rods **92**, **94** relatively equally between the fully undeployed and the fully deployed positions. It is contemplated that more than one second actuator **102** may be provided in the second actuation unit **100** for driving the slide **84**.

[0056] In some examples, the slide **84** is directly coupled with the upper support assembly **16**. In such an example, the mount **86** is fastened to a bottom surface of the structure **66**. In such an example, the stroke of the slide **84** may be reduced, as translation of the upper leg support **64**

between forward and rearward positions may provide sufficient movement for the lower leg support **20** to rotate. Thus, the slide **84** may be omitted in this example.
[0057] As illustrated in FIGS. **2** and **4**, a third actuation unit **108** is provided in the lower leg support **20** for driving rotation of the bun **74** to pivotably more the calf support assembly **18** relative to the rotation axis **22**, which is formed between the curved portions **98** of the rods **92**, **94**. The third actuation unit **108** may include any of the mechanisms previously described with respect to the first and second actuation units **68**, **100**. For example, a third actuator **110** may be provided in the lower leg support **20** such that, upon actuation, the bun **74** rotates in the fore-aft direction. In another example, a manual interface (e.g., a lever, a knob, etc.) is provided to rotate the bun **74** between a fore position and an aft position.
[0058] Referring now to FIGS. **6**A-**6**D, an exemplary motion between deployed and undeployed positions and fore and aft positions of the lower leg support **20**, as well as motion of the upper leg support **64** between a rearward position and a forward position, is demonstrated. In FIG. **6**A, the lower leg support **20** is translated away from the fully undeployed position (e.g., a nested position), as demonstrated by the position of crossmember **96** in FIG. **5** relative to the position of the crossmember **96** in FIG. **6**A. During deployment of the lower leg support **20**, the upper leg support **64** is moveable from the rearward position to the forward position. While these movements may be independent, a controlled software routine to move or a coordinated movement established via electrical communication may cause the seating assembly **10** to recline, extend the upper leg support **64**, and deploy the lower leg support **20** concurrently.
[0059] Once the lower leg support **20** is fully deployed (FIG. **6**B), space between the floor **24** of the vehicle **26** and the lower leg support **20** may be sufficient to allow rotation of the lower leg support **20**. Because the various components (e.g., the upper support assembly **16** and the lower support assembly **18**) generally provides translational movement at an oblique angle **112** relative to the floor **24** of the vehicle **26**, forward movement of these components may increase clearance from the floor **24**. For example, a closest potential contact point **114** between the floor **24** and the bun **74** may, along a rotational path, intersect with the floor **24** in the undeployed position. However, in the fully or partially deployed positions, the closest potential contact point **114** is free from engagement with the floor **24** due to the radial spacing between the rotation axis **22** and the floor **24**.
[0060] As illustrated in FIG. **6**C, the lower leg support **20** is fully deployed and in the fore position. In this position, the second surface **78** may support the calves of the user. For example, the second surface **78** may incline relative to the floor **24** and be positioned forward of the upper leg support **64**. Accordingly, a reclined position may be achieved. As demonstrated in FIG. **6**D, when the lower leg support **20** is in the fore position, it may be returned to the undeployed position. Thus, although referred to as “undeployed,” the lower support assembly **18** may still support the lower legs of a user. When nested beneath the upper support assembly **16**. In this example, a target position of the seating assembly **10** may be a not-fully-reclined position, as the upper leg assembly is also in the rearward position.
[0061] It is to be understood that variations and modifications can be made on the aforementioned structure without departing from the concepts of the present disclosure, and further it is to be understood that such concepts are intended to be covered by the following claims unless these claims by their language expressly state otherwise.

Claims

1. A seating assembly comprising: a seat frame; a seat pan coupled with the seat frame; a leg extension assembly coupled with the seat pan; and a calf support assembly disposed under the leg extension assembly and translatable relative to the seat pan, wherein the calf support assembly includes a calf support rotatable about a rotation axis, and wherein rotation axis is translatable relative to the seat pan.

2. The seating assembly of claim 1, wherein the calf support assembly includes at least one guide sleeve coupled to one of the seat pan and the leg extension assembly and at least one rod coupled to the calf support and slidable through the guide sleeve.
3. The seating assembly of claim 2, further comprising: a motor operably coupled with the at least one rod and configured to move the at least one rod through the at least one guide sleeve to translate the calf support.
4. The seating assembly of claim 3, wherein the motor is configured to translate the rotation axis relative to the leg extension assembly.
5. The seating assembly of claim 3, wherein the at least one rod includes: a first rod disposed adjacent one side of the seating assembly and configured to engage the first guide sleeve of the at least one guide sleeve; and a second rod disposed adjacent an opposing side of the seating assembly and configured to a second guide sleeve of the at least one guide sleeve.
6. The seating assembly of claim 5, further comprising: a crossmember extending laterally between the first rod and the second rod.
7. The seating assembly of claim 6, wherein the motor is disposed centrally between the first rod and the second rod.
8. The seating assembly of claim 6, further comprising: a mount extending substantially parallel to the crossmember between the first and second guide sleeves.
9. The seating assembly of claim 8, wherein the motor is disposed in the mount.
10. The seating assembly of claim 8, wherein the mount is coupled to an underside of the leg extension assembly.
11. The seating assembly of claim 1, further comprising: an actuator disposed in the calf support and configured to drive rotation of the calf support about the rotation axis.
12. The seating assembly of claim 11, further comprising: a motor configured to translate the leg extension assembly in a fore-aft direction independent of translation of the rotation axis.
13. A seating assembly comprising: a seat frame; a seat pan coupled with the seat frame; a leg extension assembly coupled with the seat pan; a calf support operably coupled with the seat pan and pivotable about a rotation axis; and a guide sleeve disposed under the seat pan configured to receive a rod coupled with the calf support, where the rod is slidable within the guide sleeve to allow translation of the rotation axis.
14. The seating assembly of claim 13, further comprising: a motor operably coupled with the rod and configured to move the rod through the guide sleeve to translate the calf support.
15. The seating assembly of claim 14, further comprising: a mount coupled to the seat pan, wherein the guide sleeve is coupled with the mount.
16. The seating assembly of claim 15, wherein the motor is disposed in the mount.
17. The seating assembly of claim 14, wherein the motor is configured to translate the rotation axis relative to the leg extension assembly.
18. The seating assembly of claim 13, further comprising: an actuator disposed in the calf support and configured to drive rotation of the calf support about the rotation axis.
19. The seating assembly of claim 18, further comprising: a motor configured to translate the leg extension assembly in a fore-aft direction independent of translation of the rotation axis.
20. A seating assembly comprising: a seat frame; a seat pan coupled with the seat frame; a leg extension assembly coupled with the seat pan; a calf support assembly disposed under the seat pan including: a first guide sleeve disposed adjacent one side of the seating assembly; a second guide sleeve disposed adjacent an opposing side of the seating assembly; a first rod slidably disposed in the first guide sleeve; a second rod slidably disposed in the second guide sleeve; and a calf support coupled with the first and second rods and translatable relative to the seat pan; and an actuator operably coupled with the first and second rods and configured to move the first and second rods through the first and second guide sleeve to translate the calf support.