

CLAIMS:

1. A seat comprising:
a moveable seat carriage having a seat pan and a seat back supported
5 thereon;
a seat base supporting the moveable seat carriage thereupon;
a support member moveable between a retracted configuration and an
extended configuration, wherein a first end of the support member is coupled to
the moveable seat carriage and a second end of the support member is
10 coupled to the seat base; and
an actuator to move the moveable seat carriage relative to the seat
base to thereby transition the seat between an upright position and a reclined
position, with the movement of the seat carriage driving the support member
between the retracted configuration and the extended configuration,
15 wherein, the support member stiffens the seat as the seat transitions
away from the upright to the reclined position and while in the reclined position.
2. The seat according to claim 1, wherein the support member is a scissor
mechanism.
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3. The seat according to claim 2, wherein the scissor mechanism includes a
primary pair of arms coupled together for pivoting movement about an axis
extending perpendicular to a plane of each of the primary pair of arms between
the extended configuration in which the primary pair of arms lie substantially on
25 top of each other parallel to the first direction and the retracted configuration in
which the primary pair of arms lie substantially on top of each other
perpendicular to the first direction; and wherein the first ends of each of the
primary pair of arms are coupled with the seat base and the second ends of
each of the primary pair of arms are coupled with the seat carriage.
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4. The seat according to claim 3, wherein the axis bisects each of the primary pair
of arms between a first end and a second end of each arm.
5. The seat according to claim 3 or claim 4, wherein the scissor mechanism
35 comprises:

- 38 -

a secondary pair of arms, the secondary pair of arms pivotally connected to one another at first ends thereof to form a V-shaped arrangement when viewed in plan view;

5 each second end of the secondary pair of arms being pivotally connected to one of each of the first ends of the primary pair of arms, respectively

such that the first ends of the primary pair of arms are coupled to the seat base via the secondary pair of arms.

10 6. The seat according to claim 5, wherein the scissor mechanism comprises:

a tertiary pair of arms, the tertiary pair of arms pivotally connected to one another at first ends thereof to form a V-shaped arrangement when viewed in plan view;

15 each second end of the tertiary pair of arms being pivotally connected to one of each of the second ends of the primary pair of arms, respectively

such that the second ends of the primary pair of arms are coupled to the seat carriage via the tertiary pair of arms.

20 7. The seat according to any one of the preceding claims, wherein the moveable seat carriage and the seat pan further comprise complementary seat frames which support the seat pan and the seat back.

25 8. The seat according to claim 7, wherein the seat frame comprises a cam surface and the seat pan frame comprises a cam follower, with the cam follower movably supported on the cam surface, such that movement of the seat pan frame relative to the seat frame follows the cam surface to vary orientation of the seat pan frame.

30 9. The seat according to any one of the preceding claims, wherein the seat back is pivotally connected to the seat pan, such that movement of the seat pan causes movement of the seat back.

10. The seat according to any one of the preceding claims, comprising a deployment mechanism connected to the seat back, such that, in use, as the

- 39 -

movable seat carriage moves away from the seat base, the deployment mechanism is caused to move a pair of wings mounted to the seat back.

- 5 11. The seat according to claim 10, wherein the pair of wings is coupled on opposing sides of the seat back and the wings are configured to move between an operative position where the wings extend from the seat back in an angled configuration and a storage position where the wings extend in alignment with the seat back to provide a substantially flat seat back.
- 10 12. The seat according to claim 10 or claim 11, wherein the deployment mechanism comprises a pair of telescoping members an outboard end of each being respectively coupled to one of the pair of wings.
- 15 13. The seat according to claim 12, wherein the outboard end of each of the pair of telescoping members is coupled with each of the wings respectively, such that movement of the movable seat carriage towards the seat base causes the telescoping members to urge the wings of the seat back into the operative position.
- 20 14. The seat according to any one of claims 11 to 13, wherein each wing comprises a front portion that is located on a passenger facing side of the seat and a rear portion that is located on a rear facing side of the seat.
- 25 15. The seat according to claim 14, wherein the front portion of each wing is rigidly connected to the rear portion of each wing and the rear portion extends through the seat, such that movement of the rear portion of the wing moves the front portion of the wing.
- 30 16. The seat according to claim 15, wherein an outboard end of each telescoping member engages with the respective rear portions of the wing to drive the wings between the storage position and the operative position.
- 35 17. The seat according to claim 16, comprises an armature extending along the seat-back, the armature configured to respond to movement of the movable seat carriage and thereby effect movement of the outboard ends of each

- 40 -

telescoping member along the arched track to move the wings between the operative position and the storage position.

- 5 18. The seat according to any one of claims 10 to 17, wherein an inboard end of each of the pair of telescoping members is movably mounted to a seat back frame, such that when the movable seat carriage moves the seat to a bed mode the telescoping members urge the wings into the storage position.
- 10 19. The seat according to any one of the preceding claims, wherein the seat is an aircraft seat.
- 15 20. A privacy screen for separating two adjacent seating locations on an aircraft, wherein the privacy screen is movably configured to provide an open mode, a partially-open mode and a closed mode.
21. The privacy screen according to claim 20, comprises a base member, an intermediate member and an upper member.
- 20 22. The privacy screen according to claim 21, wherein the upper member is configured to be telescopically extended and retracted from the intermediate member.
- 25 23. The privacy screen according to claim 21 or claim 22, wherein the upper member and the intermediate member are configured to be telescopically extended and retracted from the base member.
- 30 24. The privacy screen according to any one of claims 21 to 23, wherein in the open mode, the upper member and the intermediate member are fully retracted into the base member, such that an uppermost surface of the privacy screen is substantially level with a seat pan of an adjacent seat.
- 35 25. The privacy screen according to any one of claims 21 to 24, situated between a pair of seats configurable in a bed mode, wherein placing the privacy screen in the open mode and placing each of the pair of seats in the bed mode provides the passenger of each seat with a double-bed experience.

26. The privacy screen according to any one of claims 21 to 25, further comprising a pair of guides for guiding movement of the upper and intermediate members.
- 5 27. The privacy screen according to any one of claims 21 to 26, wherein at least one of the base member, the intermediate member and the upper member includes a storage compartment.
- 28 A support member for a seat the support member comprising:
10 a scissor mechanism including a primary pair of arms coupled together for pivoting movement about an axis extending perpendicular to a plane of each of the primary pair of arms between an extended configuration in which the primary pair of arms lie substantially on top of each other parallel to the first direction and a retracted configuration in which the primary pair of arms lie
15 substantially on top of each other perpendicular to the first direction; and wherein in use the first ends of each of the primary pair of arms are coupled with a seat base and the second ends of each of the primary pair of arms are coupled with a moveable seat carriage, such that, movement of the moveable seat carriage away from the seat base causes movement of the
20 scissor mechanism towards the extended configuration.
29. The support member according to claim 28, wherein the axis bisects each of the primary pair of arms between a first end and a second end of each arm.
- 25 30. The support member according to claim 28 or claim 29, wherein the scissor mechanism comprises:
a secondary pair of arms, the secondary pair of arms pivotally connected to one another at first ends thereof to form a V-shaped arrangement when viewed in plan view;
30 each second end of the secondary pair of arms being pivotally connected to one of each of the first ends of the primary pair of arms, respectively
such that the first ends of the primary pair of arms are coupled with the seat base via the secondary pair of arms.

- 42 -

31. The support member according to claim 30, wherein the scissor mechanism comprises:

a tertiary pair of arms, the tertiary pair of arms pivotally connected to one another at first ends thereof to form a V-shaped arrangement when viewed in plan view;

each second end of the tertiary pair of arms being pivotally connected to one of each of the second ends of the primary pair of arms, respectively

such that the second ends of the primary pair of arms are coupled with the seat carriage via the tertiary pair of arms.

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