

Description

The invention relates to a dual wall partition comprising first and second generally planar panels and means supporting said panels in generally parallel, generally opposed relationship.

Single panel movable or retractable partitions are well known in the art. These partitions typically include individual panels aligned in vertical edge-to-edge relationship. The panels are movable along an overhead track spanning the room or hall to be divided and can be stored either at one end of the track or in a remote area when the room is not divided.

Dual panel movable partitions are also known for example, from US-A-3 979 861, and US-A-4 027 714. The dual wall partitions disclosed in these specifications are of accordion form and require complicated connecting mechanisms between adjacent panels. Also, when the panels are arranged to form a partition, the joints between the panels of one row are directly opposite the joints between the panels of the other row. This can result in unsatisfactory acoustic and fire-resisting performance.

DE-A-2 353 927 discloses an adjustable wall element in which a pair of parallel, opposed panels are interconnected by a number of links which are pivoted to each panel so that the panels can be moved relative to each other between a closed position in which the panels lie face to face for transport purposes and an open position in which the panels are spaced apart by a maximum distance determined by the links.

The present invention is concerned with making use of a similar connection principle in a movable dual wall partition to provide an improved partition compared with the known partitions of the accordion type.

According to the invention, there is provided a dual wall partition comprising first and second generally planar panels, and means supporting said panels in generally parallel, generally opposed relationship, said supporting means including a hinge assembly extending between said panels for permitting a range of spacing of said panels relative to each other to vary the spacing therebetween from a maximum determined by the dimensions of said hinge assembly to selected spacings which are less than said maximum and so that said panels remain substantially parallel throughout said spacing range, and said hinge assembly comprising an elongate link having opposed first and second ends, said first end being pivoted to said first panel for rotation relative to said first panel about a first axis, and said second end of the link being pivoted to said second panel for rotation relative to said second panel about a second axis parallel to said first axis, characterised in that the elongate link is provided with a pivot axis intermediate its opposed first and second ends and parallel to said first and second axes, and said hinge assembly also comprises means for mounting said link

on track means for common movement along the track means in a direction transverse to said pivot axis and for rotation relative to the track means about said pivot axis.

Preferably the supporting means includes a plurality of said hinge assemblies extending between said panels at spaced points on said panels so that an adjacent pair of said hinge assemblies and said panels generally form a parallelogram.

The hinge assembly may further comprise a first member fixed to the associated first panel, and a second member fixed to the associated second panel, one end of the link being pivotally connected to the first member for rotation relative thereto about the generally vertical first axis, and the opposite end of the link being pivotally connected to the second member for rotation relative thereto about the generally vertical second axis. Thus, one end of the link is pivoted to the associated first panel, and the other end of the link is pivoted to the associated second panel.

The assembly may further include a pivot linkage having an upper end adapted to be movably connected to the track means along which the partition moves, and a lower end pivoted to the link for rotation of the link relative to the track means about the vertical pivot axis.

In a first position, the link may extend generally perpendicularly to the panels and the panels are then separated by a distance approximately equal to the length of the link. In a second position, the link is rotated approximately through 90° relative to the first position (or parallel to the panels) and the panels are separated by a distance approximately equal to the width of the link. Thus, the hinge assembly permits a range of movement of the connected panels relative to each other to vary the spacing therebetween from a maximum determined by the length of the link to a minimum determined by the width of the link and so that the panels remain substantially parallel throughout the range of movement.

Furthermore, when a plurality of pairs of first and second panels are arranged in respective alignments, the hinge assembly permits this range of movement of the first and second panels to vary the spacing therebetween with the panels remaining in vertical edge-to-edge relationship throughout the range of movement.

Preferably, when the panels are aligned to form a partition, the links are in the first position so that the spacing between the first and second panels is at a maximum. When the panels are stacked up for storage, the links are in the second position so that the spacing between the panels is at a minimum.

Furthermore, the hinge assemblies are preferably connected to the panels so that when the panels are arranged vertically edge-to-edge to form a partition and when the links are in the first position to maximize the spacing between the panels, the vertical joints between adjacent first

panels are horizontally offset in the direction of the panels from the vertical joints between adjacent second panels. This provides improved fire-resistance and acoustic performance.

Dual wall partitions embodying the invention will now be described, by way of example, with reference to the accompanying diagrammatic drawings in which :

Figure 1 is a vertical section of an embodiment of a dual wall partition embodying the invention ;

Figure 2 is a plan view, partly in section, along line 2-2 of Figure 1 ;

Figure 3 is a reduced scale plan view similar to Figure 2 but showing an entire partition ;

Figure 4 is a perspective view, to a further reduced scale, of panels of the partition stacked for storage ;

Figure 5 is a top plan view of a pair of panels collapsed for storage ; and

Figure 6 is a top plan view of a pair of panels showing an alternative embodiment of the invention.

Before one embodiment of the invention is explained in detail, it is to be understood that the invention is not limited on its application to the details of construction and the arrangements of components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced or being carried out in various ways. Also, it is to be understood that the phraseology and terminology used herein is for the purpose of description and should not be regarded as limiting.

A dual wall partition 10 embodying the invention is illustrated in the drawing. As best shown in Figs. 2 to 4, the partition 10 comprises a plurality of first or left hand panels 12 each having opposed, generally vertical edge surfaces (14) (Fig. 2) and a plurality of second or right-hand panels 16 each having opposite, generally vertical edge surfaces 18. In the preferred embodiment, as best shown in Fig. 2, the panels 12 and 16 include tongue and groove means 20 which, when the panels 12 or 16 are aligned, interconnect adjacent vertical edge surfaces 14 or 18 of the panels 12 or 16. The tongue and groove means 20 serves both to align adjacent panels and to close the space between adjacent panels when the vertical edge surfaces of the panels are not in exact abutment.

Each partition 10 also comprises means for supporting the first panels 12 in aligned, edge-to-edge relationship, and for supporting the second panels 16 in aligned, edge-to-edge relationship and in generally parallel, generally opposed relationship with the first panels 12 irrespective of the spacing selected. This relationship is best shown in Fig. 3. The supporting means includes connecting means 22 extending between the panels 12 and 16 for permitting a range of movement of the opposed panels relative to each other to vary the spacing therebetween from a maximum determined by the connecting means 22 to selected spacings which are less than the

maximum and so that the panels 12 and 16 remain substantially parallel and in aligned edge-to-edge vertical relationship throughout the range of movement. The supporting means also supports the panels 12 and 16 for movement along a generally horizontal track 24. The track 24 and the means by which each partition 10 is supported on the track 24 is explained in greater detail hereinafter.

In the preferred embodiment, as best shown in Fig. 3, the supporting means includes a pair of the connecting means 22 extending between each pair of opposed panels 12 and 16 at spaced points on the panels so that the pair of connecting means 22 and the opposed panels 12 and 16 form a parallelogram. In the preferred embodiment, the supporting means also includes an additional pair or pairs of connecting means (not shown) extending between the lower portions of each pair of opposed panels.

Preferably, as best shown in Figs. 1 and 2, the connecting means 22 includes a hinge assembly 26 comprising an elongate link 28 having opposed first and second or left-hand and right-hand ends, and a generally vertical pivot axis 30 intermediate the opposed ends. The hinge assembly 26 also comprises a first or left-hand member 32 fixed to the associated left-hand panel 12, and a second or right-hand member 34 to the associated second or right-hand panel 16. The left-hand end of the link 28 is pivoted to the left-hand member 32 for pivoting relative to the left-hand member 32 and to the left-hand panel 12 about a first generally vertical pivot axis 36, and the right-hand end of the link 28 is pivotally connected to the right-hand member 34 for rotation relative to the right-hand member 34 and to the right-hand panel 16 about a second generally vertical pivot axis 38.

Thus, in a first position (illustrated in solid lines in Fig. 2), the link 28 extends generally perpendicularly to the panels 12 and 16 and the panels are separated by a distance approximately equal to the length of the link 28. In a second position (illustrated in chain lines in Fig. 2), the link 28 is pivoted approximately through 90° relative to the first position, or parallel to the panels 12 and 16, and the panels are separated by a distance approximately equal to the width of the link 28.

The hinge assembly 26 also comprises means for mounting the link 28 on the track 24 for horizontal movement along the track 24 and for pivoting relative to the track 24 about the pivot axis 30. The mounting means includes a pivot linkage 40 having an upper end (Fig. 1) movably connected to the track 24, and a lower end connected to the link 28 for pivoting of the link 28 relative to the track 24 about a pivot axis 30. Preferably, the track 24 and the pivot linkage 40 are part of a multidirectional suspension system such as disclosed in US-A-3 879 799.

In the preferred embodiment, the hinge assemblies 26 are connected to the panels 12 and 16 as shown in Fig. 3, such that when the spacing between the panels is at the maximum (the preferred spacing when the panels are arranged

as a partition), the joints between the vertical edge surfaces 14 of the left-hand panels 12 are horizontally offset in the direction of the panels (vertically in Fig. 3) from the joints between the vertical edge surfaces 18 of the right-hand panels 16. This provides improved acoustical and fire-resistance performance, since sound and fire must follow a staggered path through the joints in the opposed rows of panels. One exception to this is the end panels adjacent a permanent wall. There the vertical edge surfaces are directly opposite one another and each abuts the wall. When the spacing between the panels is at a minimum, and when the panels at each row are arranged in aligned relationship, the joints between the edge surfaces 14 of the left-hand panels 12 are positioned generally directly opposite the joints between the edge surfaces 18 of the right-hand panels 16. This is shown in Fig. 2. Stated alternatively, when the spacing between the panels is at a minimum, the edge surfaces 14 of the left-hand panel 12 of any pair of panels are positioned generally directly opposite the edge surfaces 18 of the right-hand panel 16 of that pair. This is shown in Fig. 5.

It should be noted that, as shown in Fig. 3, due to the offset of the joints between the panels of the rows, one of the end panels (the lower panel in Fig. 3) of the row of left-hand panels 12 and one of the end panels (the upper panel in Fig. 3) of the row of right-hand panels 16 is of less horizontal extent than the remaining panels.

An alternative embodiment is illustrated in Fig. 6, wherein the hinge assemblies 50 are connected within recesses 52 in opposed panels so that the panels can be collapsed with no space in between.

Claims

1. A dual wall partition (10) comprising first (12) and second (16) generally planar panels and means (22) supporting said panels in generally parallel, generally opposed relationship, said supporting means including a hinge assembly (26) extending between said panels for permitting a range of spacing of said panels relative to each other to vary the spacing therebetween from a maximum determined by the dimensions of said hinge assembly to selected spacings which are less than said maximum and so that said panels (12, 16) remain substantially parallel throughout said spacing range, and said hinge assembly comprising an elongate link (28) having opposed first and second ends, said first end being pivoted to said first panel (12) for rotation relative to said first panel about a first axis (36), and said second end of the link (28) being pivoted to said second panel (16) for rotation relative to said second panel about a second axis (38) parallel to said first axis, characterised in that the elongate link is provided with a pivot axis (30) intermediate its opposed first and second ends and parallel to said first and second axes, and said hinge assembly

also comprises means (40) for mounting said link (28) on track means (24) for common movement along the track means in a direction transverse to said pivot axis and for rotation relative to the track means about said pivot axis (30).

2. A partition as claimed in claim 1, wherein said supporting means includes a plurality of said hinge assemblies (26) extending between said panels (12, 16) at spaced points on said panels so that an adjacent pair of said hinge assemblies and said panels generally form a parallelogram.

3. A partition as claimed in claim 1, wherein said link mounting means includes a pivot linkage (40) having a first end movably connected to the track means (24), and a second end connected to said link (28) for rotation of said link relative to the track means about said pivot axis (30).

4. A partition as claimed in claim 1, wherein said hinge assembly (26) further comprises a first member (32) fixed to said first panel (12), and a second member (34) fixed to said second panel (16), said first end of said link (28) being pivotally connected to said first member (32) for rotation relative to said first member about said first axis (36), and said second end of said link (28) being pivotally connected to said second member (34) for rotation relative to said second member about said second axis (38).

5. A partition as claimed in any one of claims 1 to 4, characterized in that, in a first position, said link (28) extends generally perpendicularly to said panels (12, 16) and said panels are separated by a distance approximately equal to the length of said link and, in a second position, said link is pivoted approximately 90° relative to said first position and said panels are separated by a distance approximately equal to the width of said link.

6. A partition as claimed in any one of the preceding claims, wherein there are a plurality of first panels (12) each having opposed generally vertical edge surfaces (14), and a plurality of second panels (16) each having opposed generally vertical edge surfaces (18), said supporting means (22) supporting said first panels (12) in horizontally aligned relationship, and supporting said second panels (16) in horizontally aligned relationship and in generally parallel, generally opposed relationship with said first panels.

7. A partition as claimed in claim 6, wherein when the spacing between said first and second panels (12, 16) is at said maximum, the joints between the vertical edge surfaces (14) of said first panels (12) are offset in the direction of said panels from the joints between the vertical edge surfaces (18) of said second panels (16), and, when the spacing between said first and second panels is at a minimum, the joints between said vertical edge surfaces (14) of said first panels (12) are positioned generally directly opposite the joints between said edge surfaces (18) of said second panels (16).

8. A partition as claimed in claim 6 or claim 7, wherein a hinge assembly (26) extends between each pair of opposed first and second panels (12, 16) for permitting a range of movement of the

as a partition), the joints between the vertical edge surfaces 14 of the left-hand panels 12 are horizontally offset in the direction of the panels (vertically in Fig. 3) from the joints between the vertical edge surfaces 18 of the right-hand panels 16. This provides improved acoustical and fire-resistance performance, since sound and fire must follow a staggered path through the joints in the opposed rows of panels. One exception to this is the end panels adjacent a permanent wall. There the vertical edge surfaces are directly opposite one another and each abuts the wall. When the spacing between the panels is at a minimum, and when the panels at each row are arranged in aligned relationship, the joints between the edge surfaces 14 of the left-hand panels 12 are positioned generally directly opposite the joints between the edge surfaces 18 of the right-hand panels 16. This is shown in Fig. 2. Stated alternatively, when the spacing between the panels is at a minimum, the edge surfaces 14 of the left-hand panel 12 of any pair of panels are positioned generally directly opposite the edge surfaces 18 of the right-hand panel 16 of that pair. This is shown in Fig. 5.

It should be noted that, as shown in Fig. 3, due to the offset of the joints between the panels of the rows, one of the end panels (the lower panel in Fig. 3) of the row of left-hand panels 12 and one of the end panels (the upper panel in Fig. 3) of the row of right-hand panels 16 is of less horizontal extent than the remaining panels.

An alternative embodiment is illustrated in Fig. 6, wherein the hinge assemblies 50 are connected within recesses 52 in opposed panels so that the panels can be collapsed with no space in between.

Claims

1. A dual wall partition (10) comprising first (12) and second (16) generally planar panels and means (22) supporting said panels in generally parallel, generally opposed relationship, said supporting means including a hinge assembly (26) extending between said panels for permitting a range of spacing of said panels relative to each other to vary the spacing therebetween from a maximum determined by the dimensions of said hinge assembly to selected spacings which are less than said maximum and so that said panels (12, 16) remain substantially parallel throughout said spacing range, and said hinge assembly comprising an elongate link (28) having opposed first and second ends, said first end being pivoted to said first panel (12) for rotation relative to said first panel about a first axis (36), and said second end of the link (28) being pivoted to said second panel (16) for rotation relative to said second panel about a second axis (38) parallel to said first axis, characterised in that the elongate link is provided with a pivot axis (30) intermediate its opposed first and second ends and parallel to said first and second axes, and said hinge assembly

also comprises means (40) for mounting said link (28) on track means (24) for common movement along the track means in a direction transverse to said pivot axis and for rotation relative to the track means about said pivot axis (30).

2. A partition as claimed in claim 1, wherein said supporting means includes a plurality of said hinge assemblies (26) extending between said panels (12, 16) at spaced points on said panels so that an adjacent pair of said hinge assemblies and said panels generally form a parallelogram.

3. A partition as claimed in claim 1, wherein said link mounting means includes a pivot linkage (40) having a first end movably connected to the track means (24), and a second end connected to said link (28) for rotation of said link relative to the track means about said pivot axis (30).

4. A partition as claimed in claim 1, wherein said hinge assembly (26) further comprises a first member (32) fixed to said first panel (12), and a second member (34) fixed to said second panel (16), said first end of said link (28) being pivotally connected to said first member (32) for rotation relative to said first member about said first axis (36), and said second end of said link (28) being pivotally connected to said second member (34) for rotation relative to said second member about said second axis (38).

5. A partition as claimed in any one of claims 1 to 4, characterized in that, in a first position, said link (28) extends generally perpendicularly to said panels (12, 16) and said panels are separated by a distance approximately equal to the length of said link and, in a second position, said link is pivoted approximately 90° relative to said first position and said panels are separated by a distance approximately equal to the width of said link.

6. A partition as claimed in any one of the preceding claims, wherein there are a plurality of first panels (12) each having opposed generally vertical edge surfaces (14), and a plurality of second panels (16) each having opposed generally vertical edge surfaces (18), said supporting means (22) supporting said first panels (12) in horizontally aligned relationship, and supporting said second panels (16) in horizontally aligned relationship and in generally parallel, generally opposed relationship with said first panels.

7. A partition as claimed in claim 6, wherein when the spacing between said first and second panels (12, 16) is at said maximum, the joints between the vertical edge surfaces (14) of said first panels (12) are offset in the direction of said panels from the joints between the vertical edge surfaces (18) of said second panels (16), and, when the spacing between said first and second panels is at a minimum, the joints between said vertical edge surfaces (14) of said first panels (12) are positioned generally directly opposite the joints between said edge surfaces (18) of said second panels (16).

8. A partition as claimed in claim 6 or claim 7, wherein a hinge assembly (26) extends between each pair of opposed first and second panels (12, 16) for permitting a range of movement of the



panels of said pairs relative to each other.

9. A partition as claimed in any one of claims 6 to 8, wherein said first panels (12) include tongue and groove means (20) interconnecting adjacent vertical edge surfaces of said first panels, and said second panels (16) include tongue and groove means (20) interconnecting adjacent vertical edge surfaces of said second panels.

10. A hinge assembly (10), characterized by an elongate link (28) having opposed first and second ends and a pivot axis (30) intermediate said ends, said first end being adapted to be pivoted to a first panel (12) for rotation relative to the first panel about a first axis (36) parallel to said pivot axis (30), and said second end being adapted to be pivoted to a second panel (16) for rotation relative to the second panel about a second axis (38) parallel to said pivot axis (30), and means (40) for mounting said link (28) on track means (24) for movement along the track means in a direction transverse to said pivot axis (30) and for rotation relative to the track means about said pivot axis.

11. An assembly as claimed in claim 10, wherein said link mounting means includes a pivot link (40) having a first end adapted to be movably connected to the track means, and a second end connected to said link (28) for rotation of said link relative to the track means about said pivot axis (30).

12. An assembly as claimed in claim 10 or claim 11, including a first member (32) adapted to be fixed to the first panel (12), and a second member (34) adapted to be fixed to the second panel (16), said first end of said link (28) being pivotally connected to said first member (32) for rotation relative to said first member about said first axis (36), and said second end of said link being pivotally connected to said second member (34) for rotation relative to said second member about said second axis (38).

Patentansprüche

1. Doppelwandige Trennwand (10) mit einem ersten (12) und einem zweiten (16), im wesentlichen planaren Paneel und einer Einrichtung (22), die die Paneele im wesentlichen in paralleler, allgemein gegenüberliegender Beziehung zueinander lagert, wobei die Lagereinrichtung eine Scharnieranordnung (26) enthält, die sich zwischen den Paneelen erstreckt, um es zu ermöglichen, einen Abstandsbereich der Paneele relativ zueinander zwischen einem maximalen Abstand, bestimmt durch die Abmessungen der Scharnieranordnung, und ausgewählten Abständen, die geringer sind als dieses Maximum zu verändern, und derart, daß die Paneele (12, 16) im wesentlichen parallel über diesen Abstandsbereich bleiben, wobei die Scharnieranordnung aufweist ein langgestrecktes Verbindungsglied (28), das gegenüberliegend ein erstes und ein zweites Ende aufweist, wobei das erste Ende schwenkbar an dem ersten Paneel (12) zur Drehung relativ zu dem ersten Paneel um eine erste Achse (36) ist

und das zweite Ende des Verbindungsgliedes (28) schwenkbar an dem zweiten Paneel (16) zur Drehung relativ zu dem zweiten Paneel um eine zweite Achse (38) parallel zu der ersten Achse ist, dadurch gekennzeichnet, daß das langgestreckte Verbindungsglied mit einer Schwenkachse (30) zwischen seinem gegenüberliegenden ersten und zweiten Ende und parallel zu der ersten und zweiten Achse versehen ist und die Scharnieranordnung ebenfalls aufweist eine Einrichtung (40) zur Lagerung des Verbindungsgliedes (28) an einer Zugmitteleinrichtung (24) zur gemeinsamen Bewegung entlang der Zugmitteleinrichtung in einer Richtung quer zu der Schwenkachse und zur Drehung relativ zu der Zugmitteleinrichtung um die Schwenkachse (30).

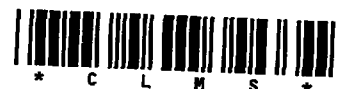
2. Trennwand nach Anspruch 1, bei der die Lagerungseinrichtung enthält eine Mehrzahl dieser Scharnieranordnungen (26), die sich zwischen den Paneelen (12, 16) an beabstandeten Stellen an den Paneelen erstrecken, so daß ein benachbartes Paar der Scharnieranordnungen und der Paneele allgemein ein Parallelogramm bilden.

3. Trennwand nach Anspruch 1, bei der die Verbindungsglied-Lagerungseinrichtung ein Schwenkverbindungsglied (40) enthält, das ein erstes Ende besitzt, welches beweglich mit der Zugmitteleinrichtung (24) verbunden ist und ein zweites Ende besitzt, das mit dem Verbindungsglied (28) für die Drehung des Verbindungsgliedes relativ zu der Zugmitteleinrichtung um die Schwenkachse (30) verbunden ist.

4. Trennwand nach Anspruch 1, bei der die Scharnieranordnung (26) außerdem aufweist ein erstes Teil (32), befestigt an dem ersten Paneel (12) und ein zweites Teil (34), befestigt an dem zweiten Paneel (16), wobei das erste Ende des Verbindungsgliedes (28) schwenkbar mit dem ersten Teil (32) zu einer Drehung relativ zu dem ersten Teil um die erste Achse (36) verbunden ist und das zweite Ende des Verbindungsgliedes (28) schwenkbar mit dem zweiten Teil für eine Drehung relativ zu dem zweiten Teil um die zweite Achse (38) verbunden ist.

5. Trennwand nach einem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß, in einer ersten Stellung, das Verbindungsglied (28) sich im wesentlichen rechtwinklig zu den Paneelen (12, 16) erstreckt und die Paneele voneinander um einen Abstand getrennt sind, der ungefähr gleich der Länge des Verbindungsgliedes ist, und, in einer zweiten Position, das Verbindungsglied ungefähr um 90° relativ zu der ersten Position geschwenkt ist und die Paneele um einen Abstand voneinander getrennt sind, der ungefähr gleich ist der Breite des Verbindungsgliedes.

6. Trennwand nach einem der vorherigen Ansprüche, wobei vorgesehen ist eine Mehrzahl erster Paneele (12), von denen jedes gegenüberliegende, im wesentlichen vertikale Kantenflächen (14) aufweist und eine Mehrzahl zweiter Paneele (16), von denen jedes gegenüberliegende, im wesentlichen vertikale Kantenflächen (18) aufweist, wobei die Lagerungseinrichtung (22) die ersten Paneele (12) in horizontal übereinstim-



mend ausgerichteter Beziehung und die zweiten-Paneele (16) in horizontal übereinstimmend ausgerichteter Beziehung und im wesentlichen parallel sowie in allgemein gegenüberliegender Beziehung zu den ersten Paneelen lagert.

7. Trennwand nach Anspruch 6, bei der dann, wenn der Abstand zwischen den ersten und zweiten Paneelen (12, 16) seinen Maximalwert besitzt, die Verbindungen zwischen den vertikalen Kantenflächen (14) der ersten Paneele (12) in Richtung der Paneele von den Verbindungen zwischen den vertikalen Kantenflächen (18) der zweiten Paneele (16) versetzt sind, und, wenn der Abstand zwischen den ersten und zweiten Paneelen ein Minimum ist, die Verbindungen zwischen den vertikalen Kantenflächen (14) der ersten Paneele (12) im wesentlichen direkt gegenüberliegend zu den Verbindungen zwischen den Kantenflächen (18) der zweiten Paneele (16) angeordnet sind.

8. Trennwand nach Anspruch 6 oder 7, bei der eine Scharnieranordnung (26) sich zwischen jedem Paar gegenüberliegender erster und zweiter Paneele (12, 16) erstreckt, um einen Bewegungsbereich für die Paneele des Paares relativ zueinander zu gestatten.

9. Trennwand nach einem der Ansprüche 6 bis 8, bei der die ersten Paneele (12) eine Zungen- und Nuteinrichtung (20) enthalten, die benachbarte vertikale Kantenflächen des ersten Paneeles verbinden und die zweiten Paneele (16) eine Zungen- und Nuteinrichtung (20) enthalten, die benachbarte vertikale Kantenflächen der zweiten Paneele verbinden.

10. Scharnieranordnung (10), gekennzeichnet durch ein langgestrecktes Verbindungsglied (28), das gegenüberliegend ein erstes und ein zweites Ende aufweist, und eine Schwenkachse (30) zwischen den Enden, wobei das erste Ende vorgesehen ist, um an einem ersten Paneel (12) für eine Drehung relativ zu dem ersten Paneel um eine erste Achse (36) parallel zu der Schwenkachse (30) geschwenkt zu werden und das zweite Ende vorgesehen ist, um an einem zweiten Paneel (16) zur Drehung relativ zu dem zweiten Paneel um eine zweite Achse (38) parallel zu der Schwenkachse (30) geschwenkt zu werden und eine Einrichtung (40) zur Lagerung des Verbindungsgliedes (28) an einer Zugmitteleinrichtung (24) zur Bewegung entlang der Zugmitteleinrichtung in einer Richtung quer zu der Schwenkachse (30) und zur Drehung relativ zu der Zugmitteleinrichtung um die Schwenkachse.

11. Anordnung nach Anspruch 10, bei der die Verbindungsglied-Lagerungseinrichtung ein Schwenkverbindungsglied (40) enthält, mit einem ersten Ende, vorgesehen, um beweglich mit der Zugmitteleinrichtung verbunden zu werden, und einem zweiten Ende, das mit dem Verbindungsglied (28) für eine Drehung des Verbindungsgliedes relativ zu der Zugmitteleinrichtung um die Schwenkachse (30) verbunden ist.

12. Anordnung nach Anspruch 10 oder 11, mit einem ersten Teil (32), vorgesehen, um an dem ersten Paneel (12) befestigt zu werden, und einem

zweiten Teil (34), vorgesehen, um an dem zweiten Paneel (16) befestigt zu werden, wobei das erste Ende des Verbindungsgliedes (28) schwenkbar mit dem ersten Teil (32) zur Drehung relativ zu dem ersten Teil um die erste Achse (36) verbunden ist und das zweite Ende des Verbindungsgliedes schwenkbar mit dem zweiten Teil (34) zur Drehung relativ zu dem zweiten Teil um die zweite Achse (38) verbunden ist.

Revendications

1. Cloison à double paroi (10) comprenant des premiers (12) et des seconds (16) panneaux généralement plans, et un moyen (22) pour supporter lesdits panneaux en relation généralement parallèle et généralement opposée, ledit moyen de support comprenant un ensemble d'articulation à charnière (26) s'étendant entre lesdits panneaux pour permettre une gamme d'espacements desdits panneaux les uns par rapport aux autres pour modifier l'espacement entre eux depuis un maximum déterminé par les dimensions dudit ensemble d'articulation à charnière jusqu'aux espacements choisis qui sont inférieurs audit maximum et de telle façon que lesdits panneaux (12, 16) restent sensiblement parallèles dans toute ladite gamme d'espacements, et ledit ensemble d'articulation à charnière comprenant une pièce de liaison allongée (28) ayant des première et seconde extrémités opposées, ladite première extrémité étant montée pivotante sur ledit premier panneau (12) pour une rotation par rapport audit premier panneau autour d'un premier axe (36), et ladite seconde extrémité de la pièce de liaison (28) étant montée pivotante sur ledit second panneau (16) pour une rotation par rapport audit second panneau autour d'un second axe (38) parallèle audit premier axe, caractérisée en ce que la pièce de liaison allongée est munie d'un axe de pivotement (30) intermédiaire entre ses première et seconde extrémités opposées et parallèle auxdits premier et second axes, et en ce que ledit ensemble d'articulation à charnière comprend également un moyen (40) pour monter ladite pièce de liaison (28) sur un moyen formant voie (24) pour un mouvement commun le long du moyen formant voie dans une direction transversale audit axe de pivotement et pour une rotation par rapport audit moyen formant voie autour dudit axe de pivotement (30).

2. Cloison selon la revendication 1, dans laquelle ledit moyen de support comprend une pluralité desdits ensembles d'articulation à charnière (26) s'étendant entre lesdits panneaux (12, 16) en des points espacés sur lesdits panneaux de sorte qu'une paire adjacente desdits ensembles d'articulation à charnière et desdits panneaux forment généralement un parallélogramme.

3. Cloison selon la revendication 1, dans laquelle ledit moyen de montage de pièces de liaison comprend une liaison de pivotement (40) ayant une première extrémité reliée de façon mobile au moyen formant voie (24), et une



seconde extrémité reliée à ladite pièce de liaison (28) pour une rotation de ladite pièce de liaison par rapport au moyen formant voie autour dudit axe de pivotement (30).

4. Cloison selon la revendication 1, dans laquelle ledit ensemble d'articulation à charnière (26) comprend en outre un premier élément (32) fixe audit premier panneau (12), et un second élément (34) fixe audit second panneau (16), ladite première extrémité de ladite pièce de liaison (28) étant reliée en pivotement audit premier élément (32) pour une rotation par rapport audit premier élément autour dudit premier axe (36), et ladite seconde extrémité de ladite pièce de liaison (28) étant reliée en pivotement audit second élément (34) pour une rotation par rapport audit second élément autour dudit second axe (38).

5. Cloison selon l'une quelconque des revendications 1 à 4, caractérisée en ce que, dans une première position, ladite pièce de liaison (28) s'étend généralement perpendiculairement auxdits panneaux (12, 16) et lesdits panneaux sont séparés par une distance approximativement égale à la longueur de ladite pièce de liaison et, dans une seconde position, ladite pièce de liaison pivote d'approximativement 90° par rapport à ladite première position et lesdits panneaux sont séparés par une distance approximativement égale à la largeur de ladite pièce de liaison.

6. Cloison selon l'une quelconque des revendications précédentes, dans laquelle il y a une pluralité de premiers panneaux (12) ayant chacun des surfaces de bordure (14) opposées généralement verticales, et une pluralité de seconds panneaux (16) ayant chacun des surfaces de bordure (18) opposées généralement verticales, ledit moyen de support (22) supportant lesdits premiers panneaux (12) en relation alignée horizontalement, et supportant lesdits seconds panneaux (16) en relation alignée horizontalement et en relation généralement parallèle et généralement opposée par rapport audit premiers panneaux.

7. Cloison selon la revendication 6, dans laquelle, lorsque l'espacement entre lesdits premiers et lesdits seconds panneaux (12, 16) est audit maximum, les jointures entre les surfaces de bordure verticales (14) desdits premiers panneaux (12) sont décalées dans la direction desdits panneaux par rapport aux jointures entre les surfaces de bordure verticales (18) desdits seconds panneaux (16), et, lorsque l'espacement entre lesdits premiers et seconds panneaux est à un minimum, les jointures entre lesdites surfaces de bordure verticales (14) desdits premiers panneaux (12) sont positionnées de façon généralement directement opposée aux jointures entre lesdites surfaces de bordure (18) desdits seconds panneaux (16).

8. Cloison selon la revendication 6 ou la revendication 7, dans laquelle un ensemble d'articulation à charnière (26) s'étend entre chaque paire de premiers et seconds panneaux (12, 16) opposés pour permettre une gamme de mouvements des panneaux desdites paires les uns par rapport aux autres.

9. Cloison selon l'une quelconque des revendications 6 à 8, dans laquelle lesdits premiers panneaux (12) comprennent des moyens à languette et rainure (20) reliant entre elles les surfaces de bordure verticales adjacentes desdits premiers panneaux, et lesdits seconds panneaux (16) comprennent des moyens à languette et rainure (20) reliant entre elles les surfaces de bordure verticales adjacentes desdits seconds panneaux.

10. Ensemble d'articulation à charnière (10), caractérisé par une pièce de liaison allongée (28) ayant des première et seconde extrémités et un axe de pivotement (30) intermédiaire entre lesdites extrémités, ladite première extrémité étant adaptée pour être montée pivotante sur un premier panneau (12) pour une rotation par rapport audit premier panneau autour d'un premier axe (36) parallèle audit axe de pivotement (30), et ladite seconde extrémité étant adaptée pour être montée pivotante sur un second panneau (16) pour une rotation par rapport audit second panneau autour d'un second axe (38) parallèle audit axe de pivotement (30), et un moyen (40) pour monter ladite pièce de liaison (28) sur un moyen formant voie (24) pour un mouvement le long du moyen formant voie dans une direction transversale audit axe de pivotement (30) et pour une rotation par rapport au moyen formant voie autour dudit axe de pivotement.

11. Ensemble selon la revendication 10, dans lequel ledit moyen de montage de la pièce de liaison comprend une pièce de liaison de pivotement (40) ayant une première extrémité adaptée pour être reliée de façon mobile au moyen formant voie, et une seconde extrémité reliée à ladite pièce de liaison (28) pour une rotation de ladite pièce de liaison par rapport au moyen formant voie autour dudit axe de pivotement (30).

12. Ensemble selon la revendication 10 ou la revendication 11, comprenant un premier élément (32) adapté pour être fixe au premier panneau (12), et un second élément (34) adapté pour être fixé au second panneau (16), ladite première extrémité de ladite pièce de liaison (28) étant reliée en pivotement audit premier élément (32) pour une rotation par rapport audit premier élément autour dudit premier axe (36), et ladite seconde extrémité de ladite pièce de liaison étant reliée en pivotement audit second élément (34) pour une rotation par rapport audit second élément autour dudit second axe (38).

