Claims

1. A hinge comprising:

a first connecting plate;

a second connecting plate;

a hinge element rotatably coupling said first and second connecting plates;

a first pin coupled to the first connecting plate, wherein said first pin extends through a first end of the hinge element;

a locking bracket movably attached to the second connecting plate by a friction lock; and

a second pin coupled to a second end of the hinge element, wherein said second pin extends through the locking bracket.; and wherein

the locking bracket and hinge element further comprise cableways for one or more cables to traverse the hinge element from the first connecting plate to the second connecting plate.

~~2. The hinge according to claim 1, wherein the locking bracket and hinge element further comprise cableways for one or more cables to traverse the hinge element from the first connecting plate to the second connecting plate.~~

~~3~~2. The hinge according to claim ~~2~~1, wherein the cableways comprise cable tabs.

~~4~~3. The hinge according to claim 1, further comprising at least one spring.

~~5~~4. The hinge according to claim 1, further comprising:

a second hinge element rotatably coupling said first and second connecting plates;

a third pin coupled to the second connecting plate, wherein said third pin extends through a first end of the second hinge element;

a second locking bracket coupled to the first connecting plate; and

a fourth pin coupled to a second end of the second hinge element, wherein said fourth pin extends through the second locking bracket.

~~6~~5. The hinge according to claim ~~5~~4, wherein said second locking brackets further comprises a friction locks.

~~7~~6. The hinge according to claim ~~5~~4, wherein said ~~first~~ hinge element and said second hinge element have the same shape.

~~8~~7. The hinge according to claim ~~5~~4, further comprising a fifth pin that longitudinally traverses both hinge elements in between the connecting plates.

~~9~~8. The hinge according to claim ~~5~~4, wherein the second locking brackets and the second hinge elements further comprise cableways for one or more cables to traverse the second hinge elements from the first connecting plate to the second connecting plate.

~~10~~9. The hinge according to claim ~~5~~4, further comprising at least one spring.

~~11~~10. The hinge according to claim ~~9~~8, wherein the cableways comprise cable tabs.

~~12~~11. The hinge according to claim 1, wherein the connecting plates are movable between an opened position and a closed position, and wherein the connecting plates are rotated 180 degrees relative to the closed position when in the opened position.

~~13~~12. The hinge according to claim ~~12~~11, wherein as the connecting plates move between the opened position and the closed position, the hinge element rotates about the first and second pins and the locking bracket shifts position relative to the second connecting plate.

~~14~~13. The hinge according to claim ~~5~~4, wherein the connecting plates are movable between an opened position and a closed position, and wherein the connecting plates are rotated 180 degrees relative to the closed position when in the opened position.

~~15~~14. The hinge according to claim ~~14~~13, wherein as the connecting plates move between the opened position and the closed position, the hinge elements rotate about the first, second, third,

and fourth pins, and the ~~first~~ locking bracket shifts position relative to the second connecting plate, and the second locking bracket shifts position relative to the first connecting plate.

~~16~~15. The hinge according to claim ~~3~~2, wherein the cable tabs comprise protrusions which extend outwardly from the locking bracket.

~~17~~16. The hinge according to claim ~~3~~2, wherein the cable tabs comprise sunken channels within the locking bracket.

~~18~~17. The hinge according to claim ~~11~~10, wherein the cable tabs comprise protrusions which extend outwardly from the second locking bracket.

~~19~~18. The hinge according to claim ~~11~~10, wherein the cable tabs comprise sunken channels within the second locking bracket.

~~20~~19. A method for mechanically and electrically connecting two electronic components comprising:

coupling a first connecting plate, a second connecting plate coupled to a locking bracket, and a hinge element by a first pin coupled to the first connecting plate, wherein said first pin extends through a first end of the hinge element and a second pin disposed within a second end of the hinge element and movably attached to the second connecting plate via the locking bracket, wherein said second pin extends through the locking bracket, and wherein the locking bracket and the hinge element further comprise cableways for one or more cables to traverse the hinge element from the first connecting plate to the second connecting plate;

attaching the first connecting plate to a first electronic component;

attaching the second connecting plate to a second electronic component; and

providing one or more wired connections between the electronic components through ~~a cableway~~the cableways formed by the connecting plates and hinge element.

~~21~~20. The method according to claim ~~20~~19, further comprising:

inserting a second hinge element rotatably coupling said first and second connecting plates;

inserting a third pin coupled to the second connecting plate, wherein said third pin extends through a first end of the second hinge element;

coupling a second locking bracket to the first connecting plate; and

inserting a fourth pin coupled to a second end of the second hinge element, wherein said fourth pin extends through the second locking bracket.

~~22~~21. The method according to claim ~~20~~19, further comprising attaching at least one spring between the electronic components.