CLAIMS

1. A USB connector comprising:

a substrate;

metal legs positioned at a surface of the substrate;

a connecting line, one end of the connecting line electrically connected with one end of the metal legs; and

a rotating shaft assembly at least partially received within an aperture defined in the substrate, wherein the rotating shaft assembly comprise a rotating shaft and a rotating shaft sleeve, the rotating shaft being rotatable in the rotating shaft sleeve~~.~~.

~~2. The USB connector according to claim 1,~~ wherein the rotating shaft has a first positioning structure thereon and the rotating shaft sleeve has a second positioning structure therein, wherein the first positioning structure is engagable with the second positioning structure to realize relative movement.

~~3~~2. The USB connector according to claim ~~2~~1, wherein the rotating shaft assembly further comprises an elastic part, the rotating shaft with the first positioning structure extending through the second positioning structure, the first positioning structure engaging with the second positioning structure to compress the elastic part within the rotating shaft sleeve.

~~4~~3. A USB device comprising:

a housing;

a USB connector positioned at an end of the housing, the USB connector comprising metal legs, a connecting line, and a substrate, the metal legs being positioned at a surface of the substrate, one end of the connecting line electrically connected with one end of the metal legs, the USB connector further comprising a rotating shaft assembly at least partially received within an aperture defined in the substrate, wherein the rotating shaft assembly comprise a rotating shaft and a rotating shaft sleeve, the rotating shaft being rotatable in the rotating shaft sleeve; wherein the rotating shaft has a first positioning structure thereon and the rotating shaft sleeve has a second positioning structure therein, wherein the first positioning structure is engagable with the second positioning structure to realize relative movement;

a printed circuit board disposed inside a cavity of the housing and electrically connected with another end of the connecting line; and

the housing defining a receptacle for receiving the USB connector.

~~5. The USB device according to claim 4, wherein the rotating shaft has a first positioning structure thereon and the rotating shaft sleeve has a second positioning structure therein, wherein the first positioning structure is engagable with the second positioning structure to realize relative movement.~~

~~6~~4. The USB device according to claim ~~5~~3, wherein the rotating shaft assembly further comprises an elastic part, the rotating shaft with the first positioning structure extending through the second positioning structure, the first positioning structure engaging with the second positioning structure to compress the elastic part within the rotating shaft sleeve.

~~7~~5. The USB device according to claim 43, wherein the USB device is a wireless network adaptor.

~~8~~6. A USB device comprising:

a substrate;

a rotating shaft sleeve having a cavity defined by a first wall that is substantially parallel to a second wall and a third wall that is substantially parallel to a fourth wall;

a rotating shaft disposed in the cavity of the rotating shaft sleeve, the rotating shaft capable of rotating relative to the rotating shaft sleeve, wherein the rotating shaft has a first positioning structure thereon and the rotating shaft sleeve has a second positioning structure therein so that the first positioning structure is engagable with the second positioning structure to realize relative movement;

metal legs positioned at a surface of the substrate, wherein an axis of the rotating shaft is substantially parallel to the surface of the substrate where the metal legs are positioned and is substantially perpendicular to an extending direction of the metal legs;

a connecting line adjacent the surface of the substrate, wherein one end of the metal legs electrically connects with one end of the connecting line;

a printed circuit board electrically connected to the metal legs through the connecting line; and

a housing, wherein the printed circuit board is disposed inside a cavity of the housing and wherein the substrate is rotatably attached to an end of the housing so that the substrate can rotate around the axis of the rotating shaft.

~~9~~7. The USB device according to claim ~~8~~6, wherein the substrate is rotatably attached to an end of the housing so that the substrate can rotate 180 degrees around the axis of the rotaing shaft.

~~10~~8. The USB device according to claim ~~8~~6, wherein the USB device further comprises an elastic part, the rotating shaft with the first positioning structure extending through the second positioning structure, the first positioning structure engaging with the second positioning structure to compress the elastic part within the rotating shaft sleeve.

~~11~~9. The USB device according to claim ~~8~~6, wherein the USB device is a wireless network adaptor.

~~12~~10. A USB device comprising:

a housing;

a USB connector positioned at an end of the housing, the USB connector comprising metal legs, a connecting line, and a substrate, the metal legs being positioned at a surface of the substrate, one end of the connecting line electrically connected with one end of the metal legs, the USB connector further comprising a rotating shaft assembly at least partially received within an aperture defined in the substrate;

a printed circuit board is disposed inside a cavity of the housing and electrically connected to the metal legs through the connecting line;

the housing defining a receptacle for receiving the USB connector;

wherein the rotating shaft assembly comprise a rotating shaft and a rotating shaft sleeve, the rotating shaft sleeve having a cavity defined by a first wall that is substantially parallel to a second wall and a third wall that is substantially parallel to a fourth wall;

wherein the rotating shaft disposed in the cavity of the rotating shaft sleeve, the rotating shaft capable of rotating relative to the rotating shaft sleeve, wherein the rotating shaft has a first positioning structure thereon and the rotating shaft sleeve has a second positioning structure therein so that the first positioning structure is engagable with the second positioning structure to realize relative movement;

wherein an axis of the rotating shaft is substantially parallel to the surface of the substrate where the metal legs are positioned and is substantially perpendicular to an extending direction of the metal legs;

wherein the rotating shaft assembly further comprises an elastic part, the rotating shaft with the first positioning structure extending through the second positioning structure, the first positioning structure engaging with the second positioning structure to compress the elastic part within the rotating shaft sleeve;

wherein the USB connector further comprise a metal layer which cover the substrate, the metal layer being opposite to the metal legs, the metal layer has a U-shaped cross-section having two flanks extending away from an undersurface of the metal layer;

wherein the USB connector further comprises a fool-proof structure to prevent the USB connector from being inserted reversely, the fool-proof strunture includes at least one first projection; wherein:

the projection extends from at least one of the two flanks of the metal layer, the projection being higher than the substrate and at a longitudinal end of the metal layer which is near the metal legs.