CLAIMS:

1. A device for holding disk-shaped articles, comprising a rotating shaft and a chuck body driven by the rotating shaft, wherein the edge of the chuck body is provided with ~~at least~~ two groups of clamping elements, each group of clamping elements comprises at least 3 clamping elements each with a ferromagnetic material and able to rotate around a mounting point~~for clamping the disk-shaped article, each of the clamping elements is mounted to a pivot with the chuck body respectively by means of the rotation of the clamping element~~ with respect to the chuck body~~–~~; the clamping elements in the same group have the same magnet polarity, while the clamping elements in different groups have the opposite magnet polarity; the inner circumference of the chuck body is provided with two sets of electromagnets having controllable polarity and energization time; a radial compression spring is connected between the bottom of the clamping element and the chuck body to provide a clamping force for the clamping element~~; a driving element is provided between the clamping element and the chuck body for pushing or drawing the clamping element to rotate~~; during cleaning the disk-shaped article, the clamping elements in the same group are consistent in action, while the clamping elements in different groups release and clamp alternately.

~~2. The device according to claim 1, wherein the driving element is an air cylinder or an electromagnet; the clamping element is provided with a corresponding ferromagnetic material if the driving element is an electromagnet.~~

~~3~~2. The device according to claim ~~2~~1, wherein ~~two groups of clamping elements are provided, and each of the clamping elements is provided with the ferromagnetic material; the clamping elements in the same group have the same magnet polarity, while the clamping elements in different groups have the opposite magnet polarity; the inner circumference of the chuck body is provided with a plurality of electromagnets;~~ the number of the electromagnet is equal to or greater than the number of the clamping elements~~; both the polarity and the energization time of the electromagnets are controlled~~.

~~4~~3. The device according to claim ~~3~~2, wherein clamping elements in different groups are evenly spaced apart.

~~5~~4. The device according to claim ~~4~~3, wherein three clamping elements are provided in each group, and eighteen electromagnets are provided; wherein the electromagnets are

divided in two sets of nine electromagnets evenly spaced apart, the electromagnets in the same set are fed with currents in the same direction.

~~6~~5. The device according to claim 1, wherein stopper members are arranged on the chuck body at positions corresponding to the clamping elements to limit the rotation of the clamping element with respect to the chuck body.

~~7~~6. The according to claim 1, wherein groove structures are arranged on the top of the clamping elements for clamping the disk-shaped article.

~~8~~7. A method for holding a disk-shaped article by a device, the device comprises a rotating shaft, and a chuck body driven by the rotating shaft for supporting the disk-shaped article, wherein two groups of clamping elements are mounted on the edge of the chuck body, each group of clamping elements comprises at least 3 clamping elements each with a ferromagnetic material and able to rotate around a mounting point with respect to the chuck body; the clamping elements in the same group have the same magnet polarity, while the clamping elements in different groups have the opposite magnet polarity; the inner circumference of the chuck body is provided with two sets of electromagnets having controllable polarity and energization time; the method comprising the step of:

performing alternate releasing and clamping of the clamping elements in different groups to clean the clamped portion of the disk-shaped article during cleaning.

~~9~~8. The method according to claim ~~8~~7, the actions of the clamping element with a ferromagnetic property is controlled by changing the polarity of the electromagnets.

~~10~~9. The method according to claim ~~9~~8, wherein further comprising the step of performing the releasing of all the clamping elements by ~~the~~ a repulsion force between the electromagnets and the clamping elements with the same polarity after cleaning the disk-shaped article; and removing the disk-shaped article from the chuck body by a mechanical hand.