Claims

1. A central nervous magnetic stimulation device, which used for health care or medical devices, comprising a power source (102), a control circuit (101) and a coil component (103); wherein, the control circuit (101) comprises a main control chip and a main circuit, the power source (102) supplies power to the control circuit (101), and the control circuit (101) outputs a time-varying current to the coil component (103) to generate a corresponding time-varying magnetic field;

wherein an action area of the time-varying magnetic field matches with a size of a human head, and the time-varying current is output at a frequency above 2000Hz, and constitutes a string of rhythmic cluster-like bursts at an appropriate duty ratio.

2. A central nervous magnetic stimulation device, which used for health care or medical devices, comprising a power source (102), a control circuit (101) and a coil component (103); wherein the control circuit (101) comprises a main control chip and a main circuit, the power source (102) supplies power to the control circuit (101), and the control circuit (101) outputs a time-varying current to the coil component (103) to generate a corresponding time-varying magnetic field;

an action area of the time-varying magnetic field matches with a size of a human head, and the time-varying current is output at a frequency above 2000Hz, and forms an envelope in a difference frequency way to output rhythm characteristics.

3. The central nervous magnetic stimulation device according to claim 1 or 2, wherein a rhythmic output of the time-varying current has an intermittent characteristic.

4. The central nervous magnetic stimulation device according to claim 1, wherein the coil component (103) comprises a plurality of coils, and outputs of the coils are independent to each other;

the coils generate outputs synchronously, or the plurality of coils are divided into several groups, and coils in each group generate outputs synchronously or in a difference frequency way; when the plurality of coils are divided into several groups, different groups output rhythm characteristics synchronously at an appropriate duty ratio, or output rhythm characteristics by forming an envelope of superimposed magnetic fields in the difference frequency way; the coil component (103) specifically comprises three coils corresponding to positions of temporal lobes on both sides of a brain and occipital lobe respectively, corresponding to positions of temporal lobes on both sides of the brain and parietal lobe respectively, or corresponding to positions of temporal lobes on both sides of the brain and frontal lobe respectively; the coil component (103) specifically comprises two coils corresponding to left and right sides of a brain respectively, or corresponding to positions of occipital lobe and parietal lobe respectively;

the coil component (103) comprises two coil groups, each of the coil groups comprises two coils corresponding to left and right sides of a brain respectively, corresponding to positions of occipital lobe and parietal lobe respectively, or located at the top of the head in parallel;

the two coil groups are partially overlapped or not overlapped, and the two coil groups generate outputs synchronously or in the difference frequency way.

5. The central nervous magnetic stimulation device according to claim 4, wherein a waveform of the time-varying current is a trapezoidal wave, a sine wave, or a triangle wave, and the time-varying magnetic field is one waveform or a combination of two or more waveforms.

6. The central nervous magnetic stimulation device according to claim 1, wherein a waveform of the time-varying magnetic field generated by the coil component (103) has a rising edge and/or a falling edge;

the waveform of the time-varying magnetic field has a rising edge and a falling edge, and there is a platform between the rising edge and the falling edge.

7. The central nervous magnetic stimulation device according to claim 6, wherein a duration corresponding to the platform tends to zero.

8. The central nervous magnetic stimulation device according to any one of claims 1-7, wherein a rhythm of the string of the rhythmic cluster-like bursts is specifically a delta rhythm, a theta rhythm, an alpha rhythm, a beta rhythm, or a gamma rhythm of brain waves.

9. The central nervous magnetic stimulation device according to any one of claims 1-7, wherein a frequency of the time-varying current is specifically 2000~20000 Hz.

10. The central nervous magnetic stimulation device according to claim 9, wherein the frequency of the time-varying current is about 2500 Hz.

11. The central nervous magnetic stimulation device according to any one of claims 1-7, wherein the power source (102) supplies the control circuit (101) with a direct current voltage of 60V or less.

12. The central nervous magnetic stimulation device according to claim 11, wherein the power source (102) supplies the control circuit (101) with a direct current voltage of 12 to 36V.

13. The central nervous magnetic stimulation device according to claim 11, wherein the power source (102) supplies the control circuit (101) with a direct current voltage of 24V.

14. The central nervous magnetic stimulation device according to any one of claims 1-7, wherein a maximum value of the peak intensity of the time-varying magnetic field within the action area matching the brain is greater than 0.5Gs and less than 20Gs, and a change rate of the peak intensity of the time-varying magnetic field over time dB/dt within the action area is less than 35T/s .

15. A healthcare or medical instrument used in combination with medicine, comprising a central nervous magnetic stimulation device, wherein the central nervous magnetic stimulation

device is the central nervous magnetic stimulation device as claimed in any one of claims 1-14.