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Application of 3 kinds of practical electromagnetic spiders in electromagnetic spider web

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Abstract: Electromagnetic spider web the launch circuit has introduced a lot , but in the center position of the utility of the spider generally have 3 kinds of circuits respectively, the use of single-chip microcomputer circuit of the low energy consumption spider by multi-channel transmission, single circuit receiver circuit. Direct use of the 3 channels of the spider and the use of PLC circuit spider, depending on the actual situation were placed.

Key words: earthquake prediction; PLC circuit; Super heterodyne receiver module; Electromagnetic spider web; GPRS switch

1 THE USE OF PLC CIRCUIT ELECTROMAGNETIC SPIDER

Our design is based on the theory of Maxwell's equations, making cloth discharging principle is in earthquake prone areas placed 6 to 8 groups (amplitude modulation 3 Road, frequency modulation 3 Road) wireless emission module (frequency by 27Mhz~49Mhz~315Mhz), (distance from near to far) using the corresponding super heterodyne, super reflex circuit receiving device receives a signal, usually 3 Road in within the range of measurement, the other 3 road at the outside of the range can be determined. Determination of abnormal signal of the earth's electric field with multiple electronic compass. A log spiral gradient is commonly used, and the eight point is placed in a similar thermometer. Spider speed is generally curl, detecting the magnetic field should be carefully not say bitter. Under the strong pressure of the seismic plate, the electromagnetic wave is usually described by divergence, which measures the change of the electric field to be taken care. PLC industrial control board FX2N-20MT does not need to convert, direct online download ladder diagram, online monitoring, power to maintain, support text and touch screen, the power supply and power supply with the power source, is no longer a common input and output isolation, the power supply ground with the board of the other ground completely isolated, in strong magnetic and other harsh environment, running stable and reliable part of the communication, made a perfect optical isolation, single output 50MA current.

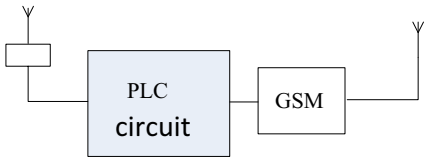

Fig.1, The use of the PLC circuit electromagnetic spider block diagram

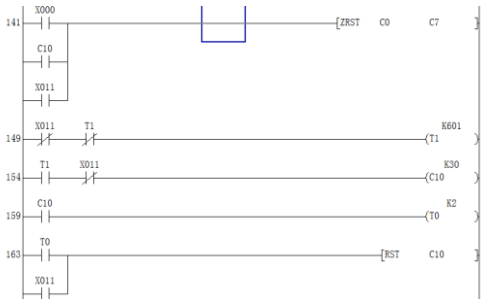

Fig.2, half an hour to receive a PLC part of the program

PLC FX-TRN-BEG-C is generally used in the introduction of basic teaching software to learn general ladder logic programming. With PLC software to determine the earth electromagnetic field anomaly and alarm, with the home thermometer indicator of the earth temperature as well as by the LED indicator of the earth electromagnetic field, can also be combined with GPRS network for remote monitoring, multiple electromagnetic spider network composed of GPRS network to determine the local electromagnetic field changes before a week before the earthquake.

2 THE USE OF SINGLE CHIP CIRCUIT OF LOW ENERGY CONSUMPTION ELECTROMAGNETIC SPIDER

This kind of spider use of single-chip microcomputer circuit of low energy consumption electromagnetic spider equipment low cost, outdoor power consumption is low, in the field can normally use more than 1 years. Use (30 m ~900 m) distance wireless remote control by multi channel transmitter, multi channel receiver circuit composition of electromagnetic fields in the range of 100 square kilometers, the main principle is: the use of electromagnetic spider network produced by the main principle is: the device is located in a dormant state micro power standby, found that the abnormal frequency of electromagnetic field, and more than a single detection system to detect the use of single chip microcomputer.

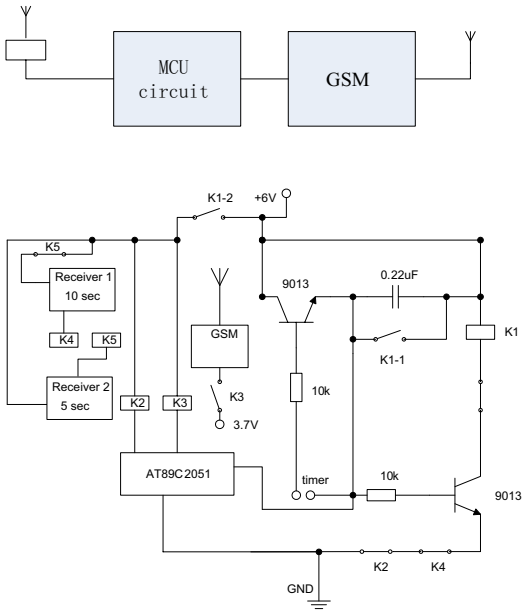

Fig.3, The use of single-chip microcomputer circuit of low energy consumption electromagnetic spider

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                ORG             0000H
                AJMP    START1
                ORG             0030H
SAME            EQU             4EH
START1:         MOV             P1,#00
START:          MOV             A,P3
                ANL             A,#1FH
                CJNE    A,#1FH,SHIY
                AJMP    START1
SHIY:           MOV             SAME,A
                LCALL   YS
                MOV             A,P3
                ANL             A,#1FH
                CJNE    A,#1FH,SHIY1
                AJMP    START1
SHIY1:          CJNE    A,SAME,START1
                CJNE    A,#17H,NEXT1
                AJMP    LEFT
NEXT1:          CJNE    A,#0FH,NEXT2
                AJMP    RIGHT
NEXT2:          CJNE    A,#1DH,NEXT3
                AJMP    EARGE
NEXT3:          CJNE    A,#1EH,NEXT4
                AJMP    BRAKE
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Fig.4, part of the program

The electromagnetic spider e-group and GPRS or GSM network remote control is by multiple transmitting and receiving circuit of the relay circuit can greatly increase the detection distance, which are composed of electromagnetic spider e-group and computer networking, by the specialized software to judge can accurate determination of the location of the epicenter of the earthquake. Electromagnetic spider e-group's principle is self multiplex emission, receiver with computer software judgment electromagnetic anomaly range, determine the type of earthquake, the epicenter location and alarm. GPRS network remote

control block diagram. The most simple GPRS control we chose the second generation GSM remote control, GSM is the full name of the System for Mobile Communications Global. A series of electrodynamics equations Maxwell equations which is the basis of our design theory and distributed transmitter. Electronic stopwatch with single-chip circuit is the core of the design of the receiving system, the long-term timing transmitting circuit. 6~8 group is generally required for the actual installation. Half the other half of the receiving area is in an area of the reception area. Remote alarm circuit in the normal electromagnetic do not start GSM, the exception of the remote automatic alarm when the alarm, the alarm after the alarm to be released from the remote control of the output off. Once the alarm can be more than 200 times, very convenient. Electromagnetic spider web in the use of if the alarm once every 72 hours, adjust the 72 hours after the alarm that the earthquake will occur within 72 hours. If the alarm once every 48 hours, adjust the alarm once again after 48 hours, said the earthquake will occur in about 48 hours. If every time 15 minutes alarm once, adjust the alarm once again after 15 minutes, said the earthquake will occur after 15 minutes. And so on. The accurate time of the earthquake magnitude and the earthquake occurrence can be analyzed by remote GPRS device. Usually do not need manual intervention. Ordinary household, as long as the choice of more than 2 can be early warning. When the abnormal electromagnetic generation, the remote automatic alarm, the alarm after the self - lock to be released from the remote control to launch the "output off" command. Commonly used instructions have the "output", "output", "open", "point", "memory", "point", "reply", "reply" and so on, very convenient

3 THE USE OF THREE REMOTE SWITCH OF THE ELECTROMAGNETIC SPIDER

Families in the use of low power long time magnetic field offset detector (earthquake predictor) by electronic compass, the compass. The use of specialized timing device for 5 seconds per minute. Magnetoelectric effect of pre earthquake electromagnetic anomaly is caused by the earthquake is one of the main factors, before the earthquake electromagnetic anomaly by a large number of examples confirmed. In today's world, earthquakes are frequent and destructive. If a few hours before the earthquake, when the earthquake occurred, can avoid many terrible things. The earth is a complex giant system, the establishment of a very precise kinetic equation is not achieved. Use of space electric field and the magnetic field of the earth changes in design of impending earthquake prediction device, the electric field, magnetic field parameter measurement is not necessary to enter the interior of the earth, easy realization of the technology, one of the major advantages of low power consumption for a long time the earth magnetic field offset detector is without debugging can work normally.

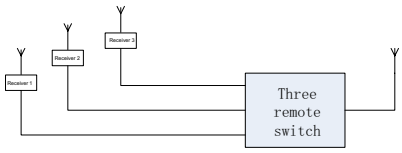

Fig.5 the use of 3 remote switch spider

Due to the static circuit power consumption is only 0.1~-0.3mA, 5 seconds per minute, when the current is generally less than 150mA, it is very economical to use electric power, No.5 batteries generally available for 1 years or so. Limited to the current level of science and technology, it is impossible to predict the magnitude of the earthquake occurrence time and place 100% accurately. But it is certain that the study of some abnormal phenomena can reduce the damage caused by the earthquake, especially the loss of human life. Using earthquake geomagnetic field before the design parameters of low power consumption for a long time earth magnetic field offset detector, can be

used for actual industrial measurements need not be carried into the interior of the earth, can be easily implemented on technology, and is suitable for large-scale low-cost cloth. Very suitable for the vast rural areas of china. Also should be extended to many families in china. Electronic compass to do the early warning circuit: the main components of the DN6851 Hall components, and now use it to monitor the earth's magnetic field, the basic principle is the use of switch type Hall sensor (Hall switch) is a new non-contact integrated circuit switch, DN6851 has a simple structure, plastic shell, small size. The combined use of two ferrite body bar to increase the magnetic field of the earth is the switch element, open collector output without contact and long service life. Fast switching speed and frequency band (direct current to 100kHz). Because the earth's magnetic field is very weak so about two ferrite rod enhanced, and achieved good results. DN6851 Hall components through the T1, T2 amplification directly driving the music integrated circuit, the circuit is connected once a minute, about 5 seconds,. When the magnetic field changes in the earthquake before the alarm. A circuit design scheme is proposed, which is simple and practical, and it is hoped to protect human's life and property in earthquake prediction. It can be predicted if they can successfully find the shock of abnormal electromagnetic field and electromagnetic wave alarm method, and then the formation of a comprehensive global monitoring system will promote the earthquake the emergence and development of before impending earthquake prediction for scientific research and earthquake prediction. Electromagnetic spider webs make up for the shortcomings of previous studies, and people are going through a powerful electromagnetic field. Human beings are higher than all animals, than any animal progress. But the dialectics tells us that every step is a step backward. When human beings are divided from the animal kingdom, many of the animals are lost. People can learn from animals. It is only from the individual animals that the abnormal performance of the natural can not come to the conclusion of the earthquake. If we in the Earth spread a electromagnetic spider web, the electromagnetic changes in the law to collect with local animal abnormal collection of comprehensive analysis, it can be animals can't come to the conclusion. This is where we humans are higher than animals. After painstaking research, we design the electromagnetic spider web was born. Why do some scientists appear to have many difficulties in seismic research? I think mainly in the three-dimensional appearance of earthquake precursor they often in point and line in the study, these are very difficult to measure the three elements of earthquake. Electromagnetic spider web is a method of area and solid, which is more advanced than the point and line method. The struggle against natural disasters must have the ability to transcend nature, and the scientific invention should be the crystallization of human wisdom. Ex seismic workers of course have an indelible contribution, but it is difficult to understand why Tangshan earthquake has not predicted success. I think that the main method of improper use of sensor.

4 DETERMINE THE EARTHQUAKE THREE ELEMENTS

The electromagnetic spider is the core of the whole device. The basic principle is that the single chip computer software is used to determine the range of electromagnetic anomalies, and to determine the type of earthquake, the location of the epicenter and the remote alarm. The earthquake, the epicenter of the earthquake, the earthquake level, known as the three elements of the earthquake. It can be predicted if they can successfully find the shock of abnormal electromagnetic field and electromagnetic wave alarm method, and then the formation of a comprehensive global

monitoring system will promote the earthquake the emergence and development of before impending earthquake prediction for scientific research and earthquake prediction. Three electromagnetic spiders in the electromagnetic spider web make up for the shortcomings of previous studies. I believe in the future we can cast a electromagnetic spider web on the earth, the electromagnetic changes were collected. It is possible to solve the difficulties in earthquake prediction.

5 SUMMARY

Pre earthquake prediction with many scientists conducting research there. For example Dr. S Kato of Hokkaido University in Japan also has a research in this area, some scientists why there appear many difficulties? I think the main reason is in stereoscopic emergence of earthquake precursor they often in point and line in the research, drilling deep wells placed one instrument, some experts put a line test resistance change, these are very difficult to measure the three elements of earthquake. Electromagnetic spider web is to the area, three-dimensional method to detect the earthquake, it should be advanced. Einstein once said: "imagination is more important than knowledge in the creation of inventions". Heaven should not negative observant and conscientious person, 1966 April 1, at 3 o'clock in the afternoon, Premier Zhou Enlai in Xingtai area of earthquake science and technology university students said: "I hope in your generation can solve the problem of earthquake prediction." Electromagnetic spider web is possible to realize this wish, and its theoretical calculation has been published in EI, SCI and ISTP. With natural disasters as a struggle must have the perseverance and ability to transcend nature, in the East China Sea in November 14, 2015 6.0 earthquake occurred before half an hour, the home of the six groups of spider web have two groups of successful prediction. It's very good. A simple saying as follows: Electromagnetic spider is not deep, Maxwell must to be learn. Log Spiral gradient, Eight point placement. Knitting speed of rotation Influence magnetic field not afraid of suffering. Divergence of plate motion change care for the electric field.

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