Claims

1. A sensing control system for an electric toy, characterized by comprising:
a signal detection module, for receiving an external sensing and then generating a sensing signal;
a calculation and control module, for receiving the sensing signal and counting a number of the sensing signal, and then sending out different control signals corresponding to different numbers of the sensing signals; and
an electric driving module for receiving the control signal and then sending a driving signal to the electric toy, so as to control the electric toy to work;
wherein the electric driving module is a motor driving module comprising a motor, the calculation and control module is provided with a single chip microcomputer (SCM), the single chip microcomputer (SCM) is stored with the control signals as follows: when a range of the number is N_1, the motor runs at a speed of S_1 for T_1 seconds; when a range of the number is N_2, the motor runs at a speed of S_2 for T_2 seconds; and when a range of the number is N_3, the motor runs at a speed of S_3 for T_3 seconds; and so forth, when a range of the number is N_m, the motor runs at a speed of S_m for T_m seconds; wherein $N_1 < N_2 < N_3 < N_m$, $S_1 < S_2 < S_3 < S_m$, and $T_1 < T_2 < T_3 < T_m$; wherein the signal detection module is a photo-sensitive sensing module that comprises a phototransistor, the phototransistor is arranged on an upper surface of the electric toy, when a user waves his or her hand above the electric toy, the phototransistor receives a sensing and accordingly sends out a sensing signal to the calculation and control module, in the case that the user waves his or her hand for X times in a continuous time period and with a time interval between two consecutive waving actions being no longer than 1 second, 1 second after a termination of the waving action of the user, the single chip microcomputer (SCM) counts the generated sensing signal and reaches a counting number X, and then respectively compares the number X with N_1, N_2, N_3 ... N_m, if X is smaller than N_1, no signal is sent out, if X is within one of N_2, N_3 ... N_m, sends out the control signal corresponding to the range of the number within which X is to the electric driving module, which further drives a motor to run

according to the specified running speed and the specified running time corresponding to that control signal.

2. The sensing control system for an electric toy as claimed in claim 1, characterized in that the signal detection module comprises a non-contact sensing circuit, the non-contact sensing circuit is provided with a sensing receiver, the sensing receiver tracks and senses an action of a user in a real time manner, with respect to each action made by the user, the sensing receiver outputs one sensing signal and sends out the sensing signal to the calculation and control module.

3. The sensing control system for an electric toy as claimed in claim 2, characterized in that the non-contact sensing circuit is selected from the group consisting of photo-sensitive sensing circuit, magnetic sensing circuit, thermal sensing circuit and sound sensing circuit.

4. The sensing control system for an electric toy as claimed in claim 1, characterized in that the calculation and control module comprises a control chip, the control chip records the number of the sensing signal sent out from the signal detection module in a continuous time period, and according to the recorded number sends out a control signal that is corresponding to the recorded number to the electric driving module.

5. The sensing control system for an electric toy as claimed in claim 4, characterized in that the control chip is stored with a plurality sets of control signals, wherein each set of control signal is corresponding to a range of the number, in the case that the recorded number is not within any one of the ranges of the number, no signal is sent out, while in the case that the recorded number is within one of the ranges of the number, send out the control signal that is corresponding to the range of the number within which the recorded number is.

~~6. The sensing control system for an electric toy as claimed in claim 1, characterized in that the signal detection module is a photo-sensitive sensing module that comprises a phototransistor, the phototransistor is arranged on an upper surface of the electric toy, when a user waves his or her hand above the electric toy, the phototransistor receives a sensing and accordingly sends out a sensing signal to the calculation and control module, in the case that the user waves his or her hand for X times in a continuous time period and with a time interval between two consecutive waving actions being no longer than 1 second, 1 second after a termination of the waving action of the user, the single chip microcomputer (SCM) counts the generated sensing signal and reaches a counting number X, and then respectively compares the number X with N_1, N_2, N_3 ... N_m, if X is smaller than N_1, no signal is sent out, if X is within one of N_2, N_3 ... N_m, sends out the control signal corresponding to the range of the number within which X is to the electric driving module, which further drives a motor to run according to the specified running speed and the specified running time corresponding to that control signal.~~

~~7.~~6. The sensing control system for an electric toy as claimed in claim 1, characterized in that the signal detection module comprises at least two non-contact sensing circuits, and each of the non-contact sensing circuits is provided with a sensing receiver, the sensing receiver tracks and senses an action of a user in a real time manner, with respect to each action made by the user, the sensing receiver outputs one sensing signal and sends out the sensing signal to the calculation and control module, and the calculation and control module then sends out a corresponding control signal based on a determination of the received combination of a plurality of sensing signals.

~~8.~~7. The sensing control system for an electric toy as claimed in claim 7, characterized in that the non-contact sensing circuit is selected from the group consisting of photo-sensitive sensing circuit, magnetic sensing circuit, thermal sensing circuit, sound sensing circuit and a combination of two or more of the foregoing.