



10th International Science, Social Science, Engineering and Energy Conference (ISEEC 2019)

<http://i-seec2019.rmuti.ac.th/>

Decision Letter

Ref No. : EE04-069
Author(s) : Associate Doctor Pisit Phokharatkul
Paper Title : Semi-Automatic Tapping Machine Control Using Microcontroller

Dear **Associate Doctor Pisit Phokharatkul**,

We are pleased to inform you that your paper entitled "**Semi-Automatic Tapping Machine Control Using Microcontroller**" is **Accepted for presentation in the 10th International Science, Social Science, Engineering and Energy Conference (ISEEC 2019) on November 20 – 23, 2019 at Rajamangala University of Technology Isan Sakon Nakhon Campus, Sakon Nakhon, Thailand.** Your paper has gone through a review process and in conclusion, you are invited to present your research findings at the conference.

As a paper presenter at the conference you are required to complete the registration as indicated in the website.

During the conference, you are expected to deliver in full your research findings in a span of 15 minutes, in which 3 minutes discussions is included.

Thank you very much for your great contribution to our conference, ISEEC 2019.

Best Regards,

Assoc. Prof. Kosit Sreephuthurn
Chairman, ISEEC 2019.
Vice President, Sakon Nakhon Campus.

Semi-Automatic Tapping Machine Control Using Microcontroller

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ABSTRACT

This paper presents a semi-automatic tapping machine development for the manufacturing industry. There are some part required for screw clamping bolt. The subsidiaries need to order tapping machine importing from foreign country which is expensive. This reason necessary to develop the tapping machine control using microcontroller to reduce cost operating. In this case, the auxiliary instrument is added on the pedestal drill. Hydraulic system is used to control the displacement distance between the work piece and drill bits using the distance data from infrared sensor. Microcontroller with infrared sensor to control the drill bits in the range to prevent a collision with the work piece base. It setting up a spiral range in work piece using the signals from infrared sensor. After completing work, the drill bits remove from a work piece automatically. Experimental results have shown that the spiral range in the work pieces are accurate for satisfactory to compare with the foreign tapping machine. The accuracy rate of the developed tapping machine in this research is about 2.5% and 5% for M4 and M10 drill bits, respectively. Furthermore, the researchers test the accuracy of infrared distance sensors compare with the ultrasonic distance sensors. The accuracy rate of infrared distance sensors are higher than the ultrasonic distance sensors.

Keywords: *Semi-automatic tapping machine, microcontroller, infrared distance sensor, ultrasonic distance sensor*



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Decision Letter

Ref No. : ETE04-077
Author(s) : Mr. Bancha Burapattanasiri
Paper Title : Multifunction CMOS signal converter circuit in current-mode

Dear **Mr. Bancha Burapattanasiri**,

We are pleased to inform you that your paper entitled "**Multifunction CMOS signal converter circuit in current-mode**" is **Accepted for presentation in the 10th International Science, Social Science, Engineering and Energy Conference (ISEEC 2019) on November 20 – 23, 2019 at Rajamangala University of Technology Isan Sakon Nakhon Campus, Sakon Nakhon, Thailand.** Your paper has gone through a review process and in conclusion, you are invited to present your research findings at the conference.

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Best Regards,

Assoc. Prof. Kosit Sreephuthurn
Chairman, ISEEC 2019.
Vice President, Sakon Nakhon Campus.

Multifunction CMOS signal converter circuit in current-mode

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ABSTRACT

This paper presents a multifunction CMOS signal converter circuit in current-mode. Under Conditions 0.5 μ m level 3 CMOS technology, and ± 2.0 V low voltage. The working operation of input receiver and output current mode responded at high frequency. The main structure consists of block set: CMOS current-mode squaring function, and current mirror circuit. The performances of proposed circuit are investigated through PSpice. The proposed circuit can be performed many functions including, squared circuit, rectifier circuit, and vector summation circuit, respectively. The simulation circuit responds a wide current, high precision, and low power losses. The advantage of proposed circuit has not distortion of the output signals.

Keywords: multifunction, CMOS, current-mode