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ELECTRICAL ENGINEERING COURSE

DIPLOMA PROJECT

PEAK SIGNAL DETECTOR

E/887

CLEANTHOUS CONSTANTINOS

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PEAK SIGNAL DETECTOR

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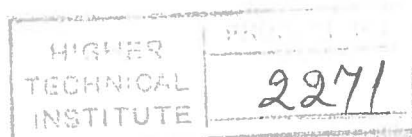
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In partial satisfaction of the award of diploma
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C.G. CLEANTHOUS

INTRODUCTION

PEAK SIGNAL DETECTOR

By : CLEANTHOUS CONSTANTINOS

The objective of this work was to analyse the electrical activity of muscle reached at different levels of force. The electromyographic (EMG) signal was reached, using the concentric needle electrode, from the biceps brachii muscle at 10%, 30%, 50%, 70%, and 100% of maximum voluntary contraction.

The signal is analysed in the time domain by' extracting the parameters ; number of zero crosses, and mean amplitude between peaks. In this project power spectrum analysis is introduced as a possible way of analysing the EMG signal.

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