Mona maghraby

بسم اللّه الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني

Mona maghraby

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم باللّه العظيم أن المادة التي تم توثيقها وتسجيلها

علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

Mona maghraby

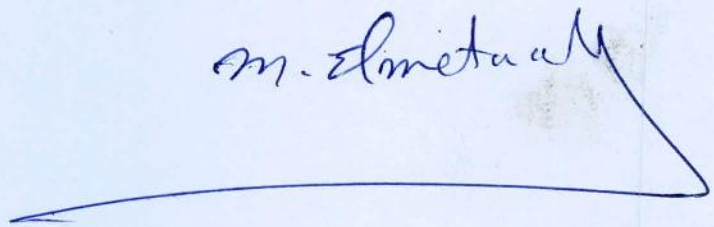
بعض الوثائق الأصلية تالفة
وبالرسالة صفحات لم ترد بالأصل

SENSORLESS ADVANCED CONTROL OF PERMANENT MAGNET DRIVE SYSTEM

BY

Mohamed Ibrahim Ibrahim Abu El-Sebah
M.Sc. Electrical Power & Machines Engineering
Electronics Research Institute

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements of the Degree of
DOCTOR OF PHILOSOPHY
in
ELECTRICAL POWER &
MACHINES ENGINEERING



FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
March 2003

SENSORLESS ADVANCED CONTROL OF PERMANENT MAGNET DRIVE SYSTEM

BY

Mohamed Ibrahim Ibrahim Abu El-Sebah
M.Sc. Electrical Power & Machines Engineering
Electronics Research Institute

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements of the Degree of
DOCTOR OF PHILOSOPHY
in
ELECTRICAL POWER &
MACHINES ENGINEERING

Under the Supervision of

Prof. Dr. Farouk Ismail Ahmed
Ex. President of Cairo University
Electric Power and Machines Department
Faculty of Engineering, Cairo University

Prof. Dr. Faeka M.H. Khater
Head of Power Electronics and
Energy Conversion Department
Electronics Research Institute

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
March 2003

SENSORLESS ADVANCED CONTROL OF PERMANENT MAGNET DRIVE SYSTEM

BY

Mohamed Ibrahim Ibrahim Abu El-Sebah
M.Sc. Electrical Power & Machines Engineering
Electronics Research Institute

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements of the Degree of
DOCTOR OF PHILOSOPHY
in
ELECTRICAL POWER &
MACHINES ENGINEERING

Approved by the
Examining Committee

Prof. Dr. Farouk Ismail Ahmed, **Thesis Main Advisor**

Prof. Dr. Faeka Mohmoud Helmy Khater, **Advisor**

Prof. Dr. Ahmed Bahgat Gamal Bahget, **Member**
Vice Dean
Graduated studies & research
Faculty of Engineering-Cairo University

Prof. Dr. Sayed Ahmed Hassan **Member**
Ex Vice President
El Monofia University
Faculty of Engineering-El Monofia University

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
GIZA, EGYPT
March 2003

Table of Content

List of Figures

List of Table