



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة بغداد

تصميم وتحليل المضمن الثنائي باستخدام الدالة الكسورية

اطروحة

مقدمة الى كلية التربية ابن الهيثم
جامعة بغداد
كجزء من متطلبات نيل درجة
دكتوراه فلسفة علوم
في الفيزياء

من قبل

ثائر عبد الكريم خليل العايش
بكلوريوس علوم 1999 ، ماجستير علوم 2002

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Design & Analysis of Laser Dual Modulator Using Fractal Function

A Thesis

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In Partial Fulfillment of the Requirements

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Doctor of Philosophy

In Physics

By

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ذَمَّ الْأَسْمَاءَ كُلَّهَا ثُمَّ عَرَضَهُمْ عَلَى الْمَلَائِكَةِ
أَنْدِيقَالِي بِأَسْمَاءَ هُوَ لَاءِ إِنْ كُنْتُمْ صَادِقِينَ



الجزء الأول

البقرة 31

اللهم اجعلنا ممن تعلم العلم لعبادة الله ونفع به غيره

Supervisors certification

We certify that this thesis is prepared under our supervision at University of Baghdad College of Education 'Ibn Al-Haitham', Department of Physics as partial requirements for the Degree of Doctor of Philosophy in Physics.

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We the members of the examining committee, certify that after reading this thesis and examining the student in its contents think it is adequate for the award of the Degree of Doctor of Philosophy in Physics with excellent grade.

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Dedication



For my Family





For my wife Hanadi





For my kids Wesam , Sandara & Rami

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