

# بسم الله الرحمن الرحيم

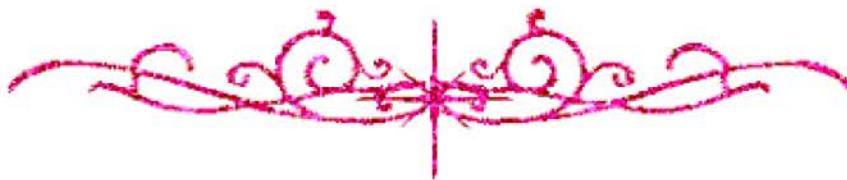


**HOSSAM MAGHRABY**



# شبكة المعلومات الجامعية

## التوثيق الالكتروني والميكروفيلم



**HOSSAM MAGHRABY**



# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
على هذه الأقراص المدمجة قد أعدت دون أية تغيرات



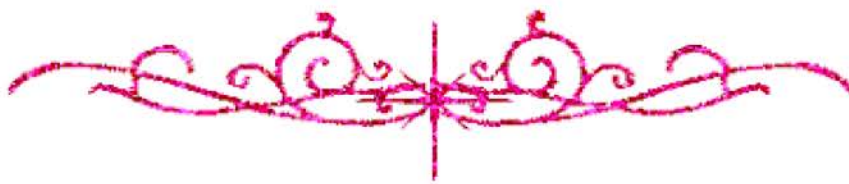
## يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

**HOSSAM MAGHRABY**



# بعض الوثائق الأصلية تالفة



**HOSSAM MAGHRABY**





بالرسالة صفحات

لم ترد بالأصل



HOSSAM MAGHRABY

B13343

**HEAT TRANSFER ENHANCEMENT AND FRICTION  
FACTOR BEHAVIOR INSIDE A RECTANGULAR DUCT  
EQUIPPED WITH TRANSVERSE PERFORATED BAFFLES  
FIXED ON TWO OPPOSITE WALLS**

**by**

**Essam El-Din Moughib Saleh Abdel-Rahman**

**A Thesis Submitted to the  
Faculty of Engineering at Cairo University  
in Partial Fulfillment of the  
Requirements for the Degree of  
MASTER OF SCIENCE  
in  
MECHANICAL ENGINEERING**

**FACULTY OF ENGINEERING, CAIRO UNIVERSITY  
GIZA, EGYPT  
24 April 2004**



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**Under the Supervision of**

**Prof. Dr. Mahmoud Ahmed Fouad**

Professor of Mechanical Power Engineering  
Faculty of Engineering  
Cairo University

**Dr. Reda Ibrahim Afify**

Associate Professor of Mechanical Engineering  
Shoubra Faculty of Engineering  
Zagazig University

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Approved by the Examining Committee :

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**FACULTY OF ENGINEERING, CAIRO UNIVERSITY  
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24 April 2004**





بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَقُلْ رَبِّیْ زِدْنِیْ عِلْمًا

صَدَقَ اللَّهُ الْعَظِيمُ



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