

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى : { وَ قُلْ رَبِّ زِدْنِي عِلْمًا }

[طه : 114]

DEDICATION

To all those who are fighting to make this world a home for all people
not just a few.

Acknowledgements

We would like to thank (Ust.Mohanad H. Eljack) for all the guidance and ideas he provided us throughout this project. Secondly we would also like to thank everyone and all friends whom were helpful to us in every aspect of this project or just tried to help, specially (Ust.Aamir Ali), (Ust.Azmi Yousof) and dear friend (Eng.Ahmed M. Elshibli) who gave us a very light full hand. Thirdly, we would like to thank teachers for everything during whole our educational live. Lastly, we want to give a big thank you to our parents for supporting us through all of our academic endeavors and every detail of our live over the past twenty years, thank you more than any time ever.

Abstract

The efficiency of solar panel is a big factor. While the sun keeps following a parabolic path throughout the day, the panels which are used are generally fixed and hence, the efficiency decreases significantly; Therefore, we have constructed a two axis solar tracker which can track the sun throughout the day to obtain the maximum efficiency.

مستخلص

الطاقة الشمسية لقيت قبول سريع وشعبية كبيرة على أنها أحد أهم مصادر الطاقة المتجددة كفاءة اللوح المستخدم لتوليد الطاقة الشمسية يمثل أحد أهم العوامل المؤثرة في إنتاج الطاقة , ولكن بما أن حركة الشمس اليومية أهليجية واللوحات الاكثر استخداما تكون ثابتة هذا سيؤثر بشكل كبير على الكفاءة بحيث تقل , لذلك كان وجود منظومة لتتبع حركة الشمس اليومية بكل الاتجاهات (تتبع الشمس على المحورين) للوصول لأقصى كفاءة ممكنة .