

## Implementing Two Rotatable Circular Polarized Glass Made Window to Reduce the Amount of Electricity Usage by Air Condition System

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**Abstract :** Air conditioning in homes may account for one-third of the electricity during period in summer when most of the energy is required in large cities. It is not consuming only electricity but also has a serious impact on environment including greenhouse effect. Circular polarizer filter can be used to selectively absorb or pass clockwise or counter-clock wise circularly polarized light. My research is about putting two circular polarized glasses parallel to each other and make a circular window with it. When we will place two circular polarized glasses exactly same way (0 degree to each other) then nothing will be noticed rather it will work as a regular window through which all light and heat can pass on. While we will keep rotating one of the circular polarized glasses, the angle between the glasses will keep increasing and the window will keep blocking more and more lights. It will completely block all the lights and a portion of related heat when one of the windows will reach 90 degree to another. On the other hand, we can just open the window when fresh air is necessary. It will reduce the necessity of using Air condition too much or consumer will use electric fan rather than air conditioning system. Thus, we can save a significant amount of electricity and we can go green.

**Keywords :** circular polarizer, window, air condition, light, energy

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