

Energy Efficient Window for Residential Use

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Abstract: *In this paper we modify a regular window of a building with solar cells placed form outside with number of series and parallel combination. Windows are usually subjected to face sun and they can capture enough energy to operate the ambient air flow control inside the room to keep room fresher with good oxygen levels. The cost of exhaust system or colling can be reduce with the help of energy efficient solar based window power generation. This system is mostly suitable for homes/flats with no terrace access for solar installation. Then we can modify the windows for power generation. The power generated throw solar energy efficient energy window can also be used for illuminating the room and thus saving in energy consumption from grid. This make homes more comfortable by reducing drafts and increasing the temperature of interior side of the windows, reducing condensation Objectives of the project, design of solar Photo- Voltic blinds for windows of buildings, Storage of energy into compact Li-Ion Batteries, Use of generated power for ambient air flow control into the green buildings.*

Keywords: solar cells