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Indoor Solar Based Cooking Stove with Storage

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Abstract: *An induction cooker fed from a renewable source of energy like solar. Many people in the flourishing areas of the world struggle to cook with stoves that emit hazardous fumes and contribute to green- house gas emission; Induction cooking is derived from the principle of electromagnetic induction by inducing eddy currents in the coil that get excited in the ferromagnetic material to cause heating.Solar Powered Induction Cooker uses solar (polycrystalline pvmodule)as a source of energy. The overall setup is done in two stages, one is Dc to Dc converter stage and the other one is conversion of boosted Dc to high frequency Ac. Dc to Dc converter is required for boosting action because output from solar panel is very less. Dc to high frequency Ac conversion stage is used in order to meet the need of high frequency requirement(50KHz) in induction cooking. The output from the converter is given to an induction coil that produces the electrical energy which is converted to heat due to the resistance of the coil that cooks tahe food very quickly..*

Keywords: Solar Panel, Charge Controller, Battery, Inverter, Induction

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