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(57) Abstract :
This invention pertains to a hybrid power generator designed for enhanced renewable energy production. Integrating solar and wind mill technologies, it maximizes efficiency and reliability in electricity generation. By synergizing solar and wind energy sources, the generator overcomes individual technology limitations, providing a consistent and sustainable power supply. Carefully planned system integration employs advanced control algorithms for optimal energy utilization. Challenges such as complementary resource availability, energy storage, site selection, maintenance, grid integration, and environmental impact are addressed. The generator features a 0.85 kg wind blade, 1-meter rotor diameter, 30% windmill efficiency, and 10 Watts solar panel capacity. The resulting total power output, calculated at 305.4112 Watts, signifies a significant advancement in hybrid power generation technology. Accompanied Drawing [FIG. 1-6]

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