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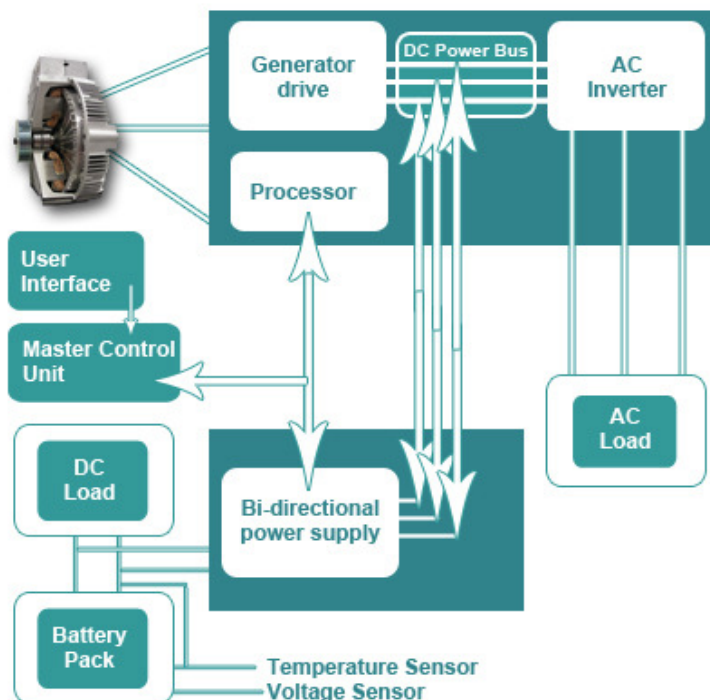
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The AuraGen is a new class of axially symmetric induction machine patented by Aura Systems Inc. Induction machines are the workhorses of industry making up 90% of all electrical rotating machinery in industry; all consisting of a rotor(s) and a stator(s). The two applications of induction machines are: Electric Motors and Generators.

As a motor, the AuraGen produces significantly higher torque per unit volume and as a generator significantly more power per unit volume. The AuraGen power system, through its revolutionary design and architecture, is able to supply (i) simultaneous DC and AC power without interruption,(ii) power from both the generator source and a battery source during times of high power demand, (iii) real time battery temperature monitoring and adjusts the charging rate accordingly, and (iv) seamlessly power with the engine-off known as silent watch. In addition, the AuraGen is a load following machine. Unlike other approaches that always generate the rated power; the instant power generated by the AuraGen is equal to the instant demanded load from the user, up to the rated power. This approach increases efficiency since the power generation is matched to the load at all times and at all RPMs. Due to the higher level of efficiency the AuraGen allows user to save fuel which is rapidly becoming a more expensive and scarce commodity.

The AuraGen Induction Power generator uses the mechanical rotating energy from an engine to produce commercial grade electrical power whenever the engine is running. The AuraGen rated power is available at or near the engine's idle RPM. The interface to the vehicle is through (i) under the hood separate belt system or (ii) engine or transmission Power Take Off ("PTO").

The AuraGen architecture separates the power generation from the power delivery through a 400 volt DC buss. The power buss is connected to an inverter to supply AC loads and to our Patented Bi-Directional Power supply to support DC loads and battery charging. The bi-Directional-Power Supply (“BPS”) provides the capability to keep the power buss at the desired voltage during power surges such as the starting of compressors, fans pumps etc.



To start such inductive loads could require as much as 5 to 10 times the power that is needed to run them. As can be seen from the diagram, this architecture allows for seamless transition from engine-on to engine-off to engine on again. As long as the power buss is held at the required voltage, the system provides uninterrupted power to the user, regardless of where the power comes from the generator or a set of batteries.