



PLUGLESS POWER™

Company Presentation

2021 - Revision F

Plug-In Tech Creates Adoption Challenges

Despite the volume of innovations that have been introduced to the EV market, the market continues to rely on dated plug-in technology.

Trip Hazard

Plug-in charging presents an inherent trip hazard.



Inclement Weather

Plug-in charging presents a variety of inconveniences in inclement weather.

Equipment Damage

Plug-in charging stations are prone to damage, vandalism & wear.



Lacking Support for Autonomy

There is no driverless autonomy without wireless technology.



ADA Indifference

Plug-in charging creates challenges for the physically challenged.



Technology the Market Needs

The challenges presented by today's plug-in technologies are resolved by Plugless Power's™ 3rd Generation Wireless Charging Systems.

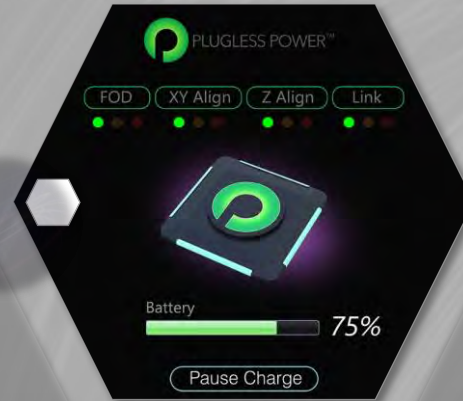


Smart Phone Integration

Plugless Power's™ charging units provide seamless smartphone integration.

Comparable Charging Rates

Plugless Power's™ charging pads can charge just as fast as a cord.



Improved Cost of Manufacture

By eliminating a separate wall-mounted module, installation costs and maintenance are minimized.

Improved Safety

With no charging cable, there are no trip hazards or challenges for those with physical impairments.

Enhanced Convenience

Wireless charging eliminates inclement weather concerns.



A History of Firsts

Plugless Power™ has been at the forefront of wireless charging in the United States, Europe and China.

1st

First Wireless EV Charging Station to Provide 1 Million Charge Hours, Including Installations at Google™ & Hertz™.

1st

First 3.3kW & 7.2kW Production Wireless Charging Station for Purchase by EV Owners.



1st

First Wireless EV Charging Station Installed on a Production Fleet of European Driverless Shuttlebuses.

1st

First Production Wireless Charging Station for Tesla Model S™

1st

First Production Wireless Charging Station to Support a Chinese Production EV with 6" Air Gap.



Patented Technology

Plugless Power's team of engineers have developed a suite of growing patented products and processes.

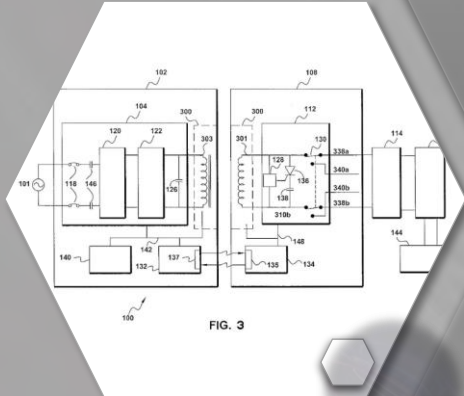


FIG. 3

Patent 9739641

Method for
Controlling Stray
Electromagnetic
Fields & Providing
Operator Feedback.

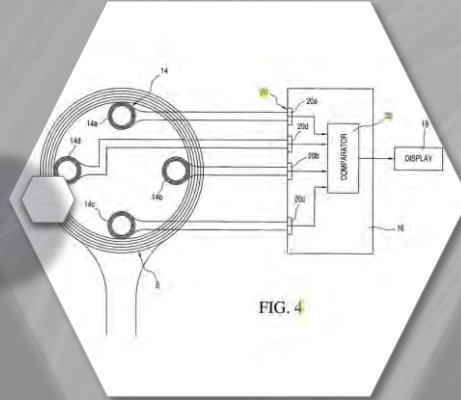


FIG. 4

Patent D706212

Battery Vehicle
Recharging Station.

Patent D736716

Control Panel for an
EV Charging Station.

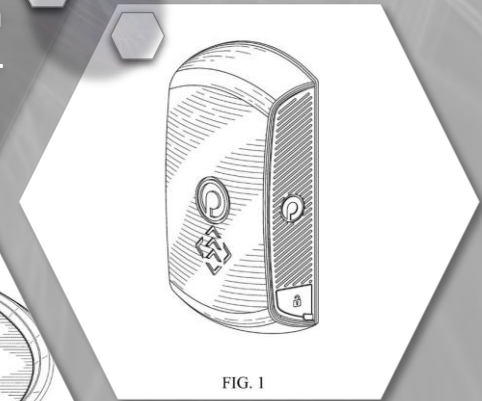
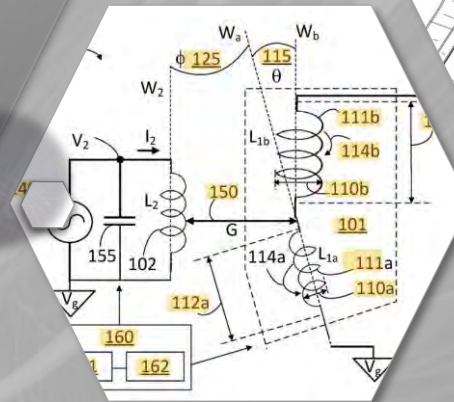


FIG. 1

Patent US20180048184

Inductive Charging
Coupling Gap
Compensation.



Patent 8796990

System & Method
for Inductively
Transferring AC
Power & Self
Alignment.

Timing is Everything

Despite the trend-setting history of Plugless Power™, market timing has never been better.



Industrial Standard

SAE J2954 Electric Vehicle Wireless Charging Standard adopted October 2020.

Market Acceptance

Wireless charging has received widespread consumer acceptance.



Autonomous Technology

Autonomous vehicles are now a reality and require a new charging infrastructure.



Government Support

Both municipal & national government support is accelerating.



Exponential Growth

EV market anticipated to double every 2 years for the foreseeable future.



Wire Free Solution

Plugless Power™ can achieve a >90% power transfer efficiency with an air gap of 12"; the largest gap distance achieved in the market.



Plugless Power's™ ability to achieve a 12" air gap allows it to be the best available solution for the market's growing truck & SUV EV's.



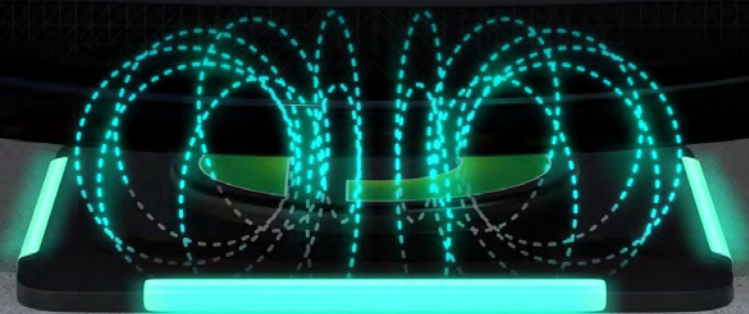
Wireless Inductive Charging



Plugless Power's™ wireless inductive charging pads require no external wall-mounted, ancillary panel to communicate with users.



Plugless Power's™ 1" wireless inductive receivers are SAE™ J2954 compliant & allow for universal communication with wireless inductive transmission pads.



Proprietary Visual Communication System

Plugless Power's™ wireless induction charging pad's integrate local communication technology.



READY

When the charging pad is ready for connection the LED indicators flash yellow



FAULT

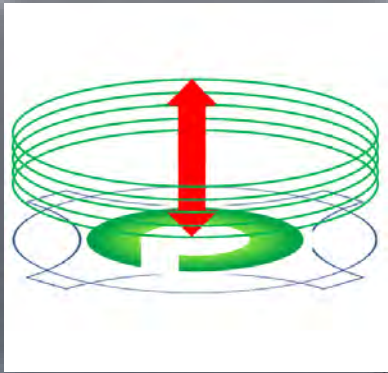
When the charging pad detects a foreign object, is out of alignment, or fails to make connection with the selected smart phone, the LED indicators flash red.



ACTIVE

When the charging pad is properly engaged with the vehicle the LED indicators flash green.

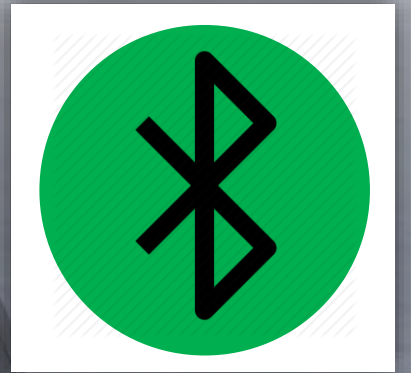
Patented Sensory Array



Z-Axis Alignment



Foreign Object Detection



Bluetooth Connectivity



XY-Axis Alignment



Proprietary Smart Phone Integration



Smart phone and wearable technology integration allow for direct user interface with the wireless charging system at all times.



Turn-Key Commercial Deployment



Plugless Power™ can provide turn-key fleet and commercial installation packages that provide wireless inductive charging pads, consumer signage, power distribution hubs & e-commerce integration.



Autonomous Vehicle Solutions

The list of market participants in autonomous driving is expanding with dozens of new product introductions and test venues planned.



Autonomy Requires Autonomy

The electric vehicle revolution will not be self-driven. Autonomous vehicle technology will require a wireless charging infrastructure.

Road Imbedded Technology

Plugless Power™ has partnered with a European wireless road imbedded charging company in order to bring to market a complete solution.



Mass Transit Autonomy

The growth in autonomous shuttles and fleet vehicles will pave the way for future advances in autonomous vehicle adoption.



Non-EV Markets Present Real Opportunities



Electrification and autonomous capabilities are evolving quickly. As these technologies and consumer trends continue to penetrate markets, there will be a growing number of opportunities for Plugless Power™.

Golf Cars & Neighborhood Electric Vehicles

The golf car and NEV markets have seen continuous growth as they find themselves in a variety of new settings & applications.

Communities & Golf Car Villages

Both planned communities & senior living environments continue to expand.

Campuses & Large Venues

Universities, large businesses, parks, and large outdoor venues have expanded their use.

Tourism

Golf car rentals have become increasingly popular in tourist destinations.

Agricultural & Industrial

OEM's are producing a variety of utility-driven packages.

Personal Recreation

Personal recreational and vacation use is continuing to expand.



Personal Mobility

With an aging population, the use of personal mobility, in the form of electric scooters & wheelchairs, continues to expand.

Airport Mobility

Airports are actively evaluating the deployment of autonomous wheelchairs.



Home Mobility

The ability to move freely within one's home must be preserved.



Shopping Mobility

The ability to support your own personal needs.



Hospital Mobility

Demand within medical environments is growing.



Outdoor Mobility

Access to outdoor venues is a priority regardless of the physical impairment.



Autonomous Drones

The number of autonomous drone wireless charging applications provides Plugless Power™ a variety of potential future revenue verticals.

Commercial

The commercial sector will see opportunities for autonomous cleaner systems.

Aerial Delivery

Several blue-chip logistics companies are currently piloting several aerial drone delivery systems.

Agriculture

Autonomous landscaping and lawncare technologies are becoming their own market.

Delivery Drones

From grocery delivery to medical supply delivery, delivery drone applications are growing.

Industrial

From inventory robots to industrial equipment, wireless charging will be needed for market growth.



Other Plugless Power™ Opportunities

The number of potential wireless charging applications provides Plugless Power™ a variety of potential future revenue verticals.

Micro-Mobility

Urban deployment of electric scooters and bicycles has become a major market.



E-Bikes

The electrification of motorcycles is fully underway with a variety of new products.



Military

The military has been working with aerial drones for years. Ground vehicles are a natural evolution.



Industrial

The industrial market has already started electrifying several heavy equipment products.



Medical

The ability to provide wireless charging to medical equipment would eliminate unnecessary power cables.





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