

Claim Map View for ip4cleantech

		HYBRID VEHICLE RECHARGING SYSTEM AND METHOD OF OPERATION					Hybrid robust predictive optimization method of power system dispatch		
Title									
File#									
Patent#		2009/0,062,967					2009/0,062,969		
Assignee Name									
Filing Date		Sep 05, 2007					Aug 28, 2007		
Total Claims		25					34		
Claim# (Independent)		1	7	12	17	23	1	12	23
Technology Category (Frequency, Desc.)	Total	2	2	3	3	2	2	2	2
charging/discharging via a grid	8								
hybrid vehicle	5								
Communicating information with a grid	5								
Scope Concept (Frequency, Desc.)	Total	4	2	3	4	3	5	4	5
a meter coupled to a hybrid vehicle to control the flow of charging power to the hybrid vehicle	4								
scheduling heat and/or power generation based on predicted future microgrid asset conditions	3								
scheduling heat and/or power generation according to an algorithm	3								
heat and/or power generation scheduled to optimize a solution of an objective function over a predetermined time horizon based on predicted future microgrid asset conditions	3								
a plurality of microgrid assets, at least one of the microgrid assets comprising a different type of asset than another one of the microgrid assets	2								
a local electrical distribution network or local utility network ultimately coupled to a hybrid vehicle to charge the vehicle	2								
scheduling recharge times for each of a plurality of hybrid vehicles, where scheduling is based on a balancing of electrical power characteristics, demand profile and the number of said hybrid vehicles	1								
processor including means for connecting and disconnecting electrical power	1								
means for adjusting operation of microgrid assets such that heat and/or power generated are scheduled to optimize a solution of an objective function over a predetermined time horizon based on predicted future microgrid asset conditions	1								
dispatching respective microgrid assets in response to a predictive optimization control algorithm, such that heat and/or power generation is scheduled to optimize a solution of an objective function associated with microgrid operation over a predetermined time horizon based on predicted future microgrid asset conditions	1								
determining an off-peak period based on an electrical demand profile for said local electrical distribution network	1								
authorizing electrical power consumption by a hybrid vehicle at a first tariff rate if said hybrid vehicle is associated with a utility account	1								
activating recharging of each of a plurality of hybrid vehicles at predetermined times during an off-peak period	1								
a receptacle electrically coupled to said battery and configured to receive electrical power from an external energy source	1								
a processor responsive to executable computer instructions for providing a signal to a meter to allow electrical power to flow to said battery	1								
a processor electrically coupled to a communications device wherein said processor is responsive to executable computer instructions for receiving schedule instructions through said communications device	1								
a dispatch controller coupled to the plurality of microgrid assets and configured for providing control signals to adjust operation of respective microgrid assets in response to a predictive optimization control algorithm	1								
a controller containing a plurality of utility accounts, wherein each utility account is associated with a corresponding individual or business entity	1								
a controller associated with a local electrical distribution network and disposed in communication with said local distribution network and a meter	1								
Keyword (Alphabetical, Desc.)	Total	14	9	15	19	10	15	12	12
utility account	1								
utility	2								
tariff rate	1								
tariff	1								
scheduling recharge times	1								
scheduling	1								
recharging	3								
recharge time period	1								
recharge	2								
receptacle	1								

