

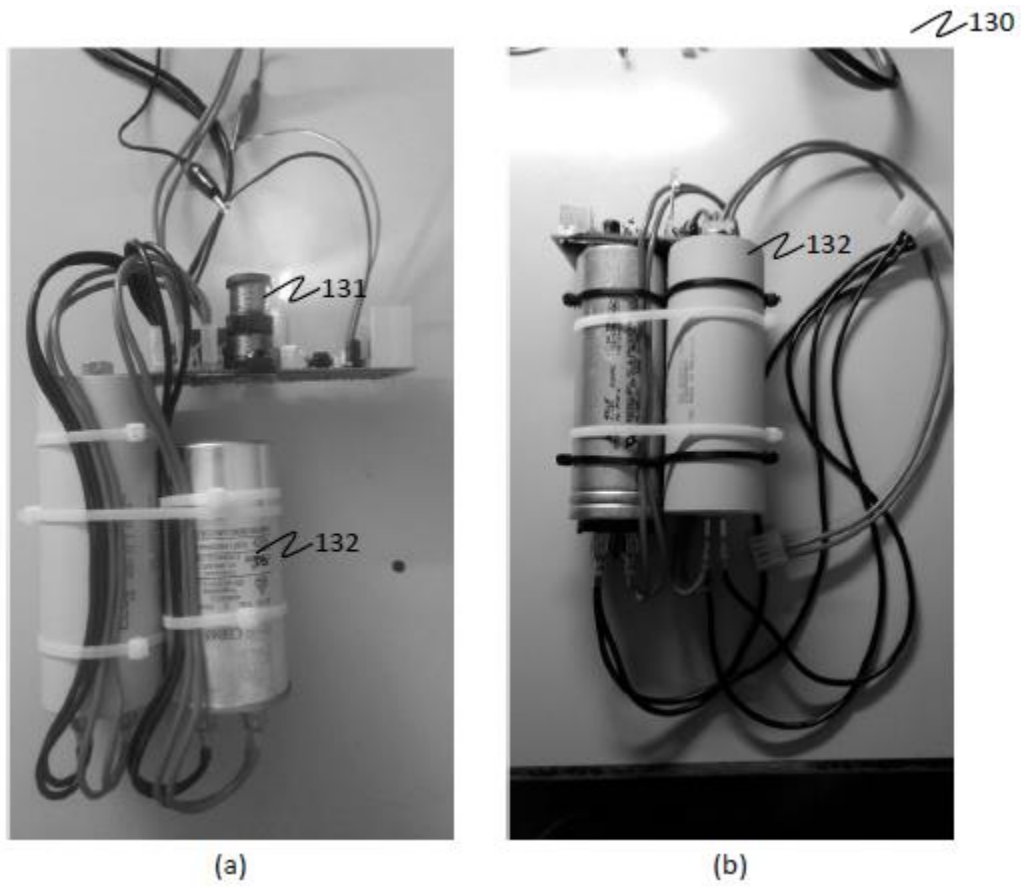


Fig. 1



Fig. 2

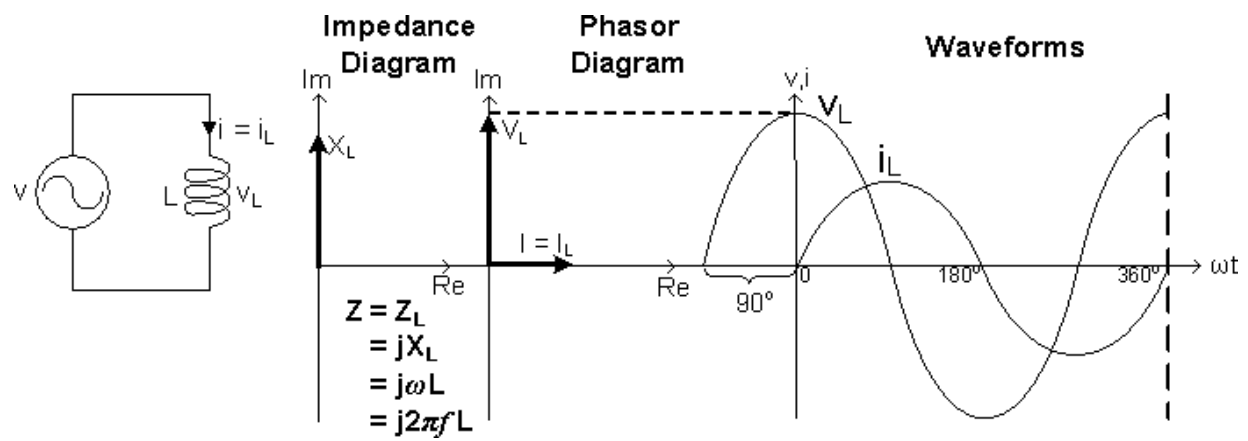


Fig. 3

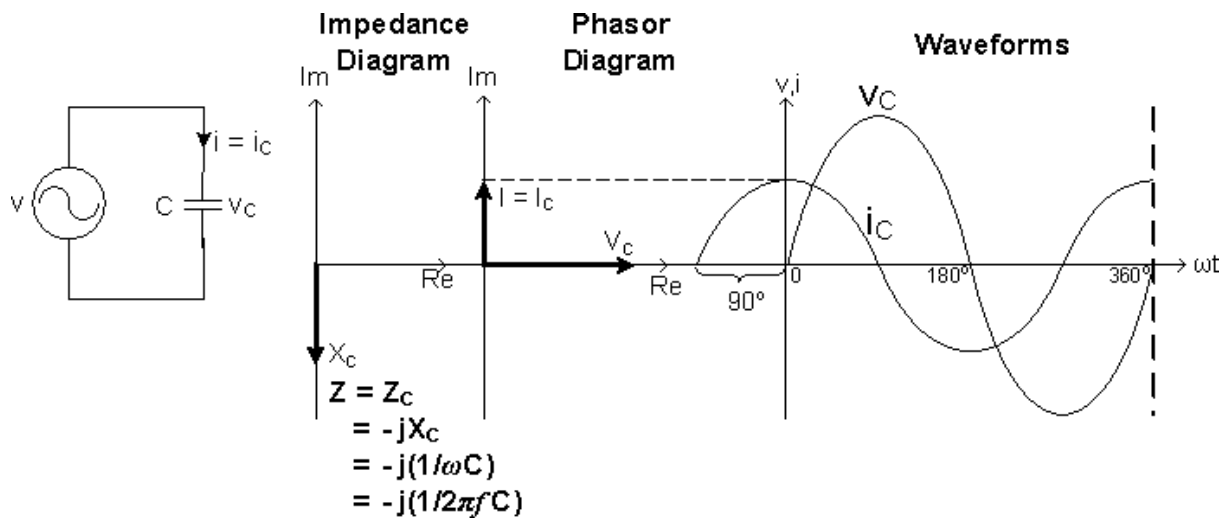


Fig. 4

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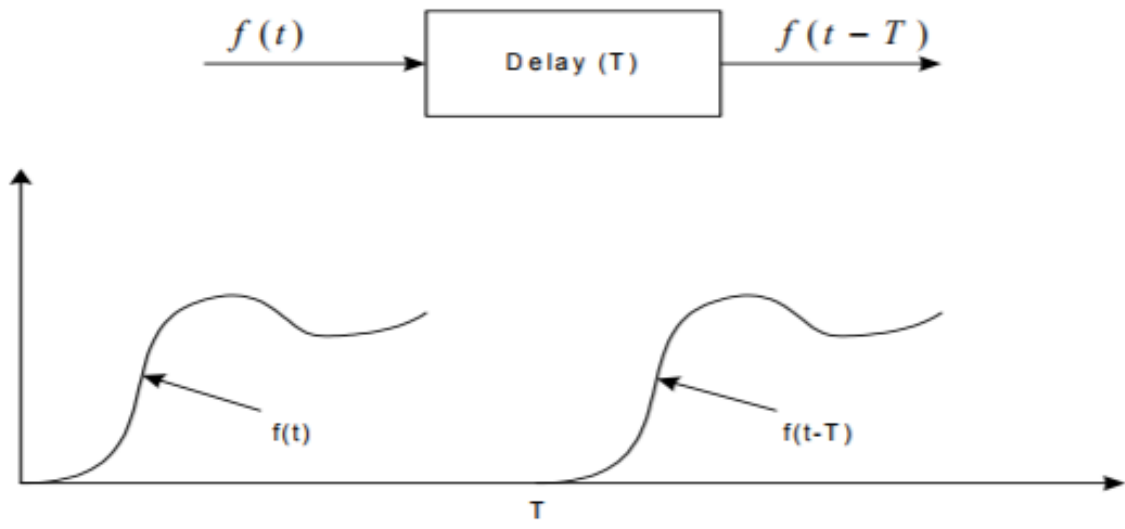


Fig. 5

Basic Electrical Machine

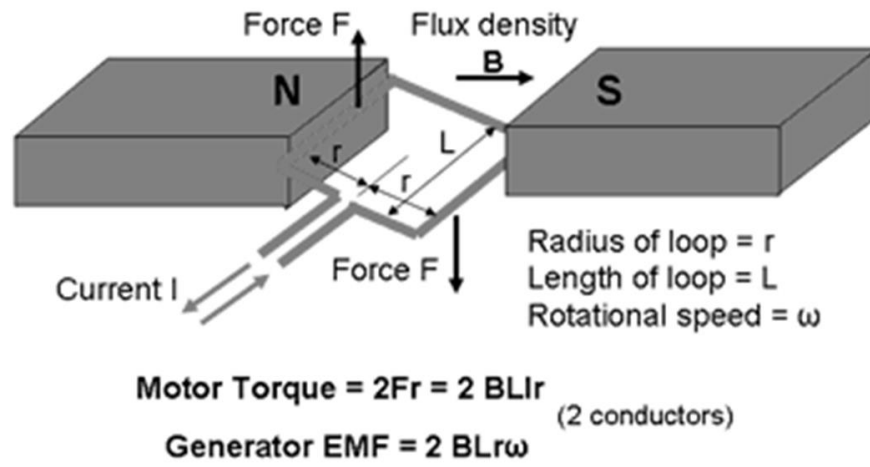


Fig. 6

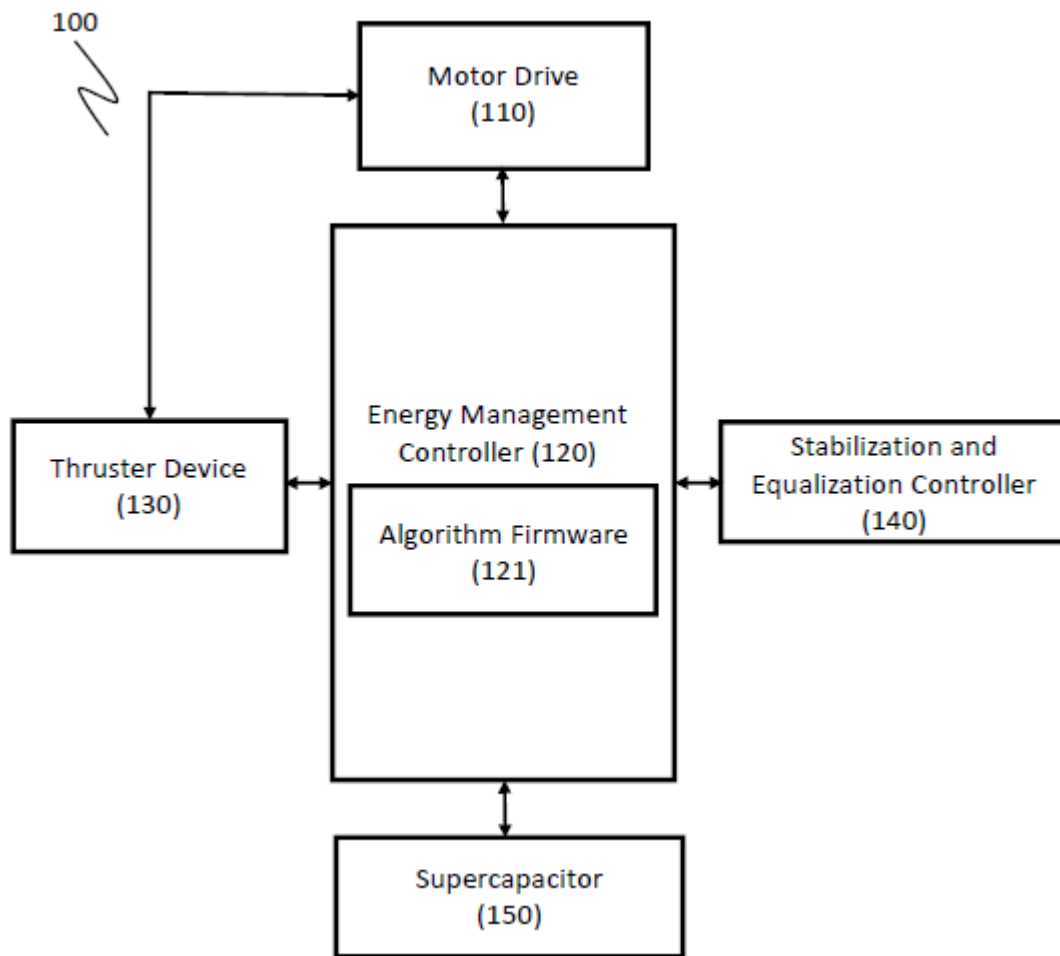


Fig. 7

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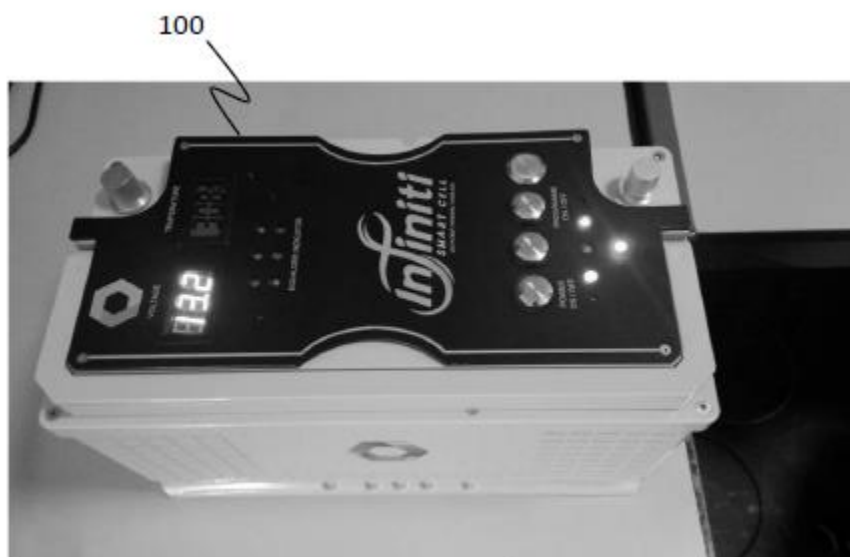


Fig. 8

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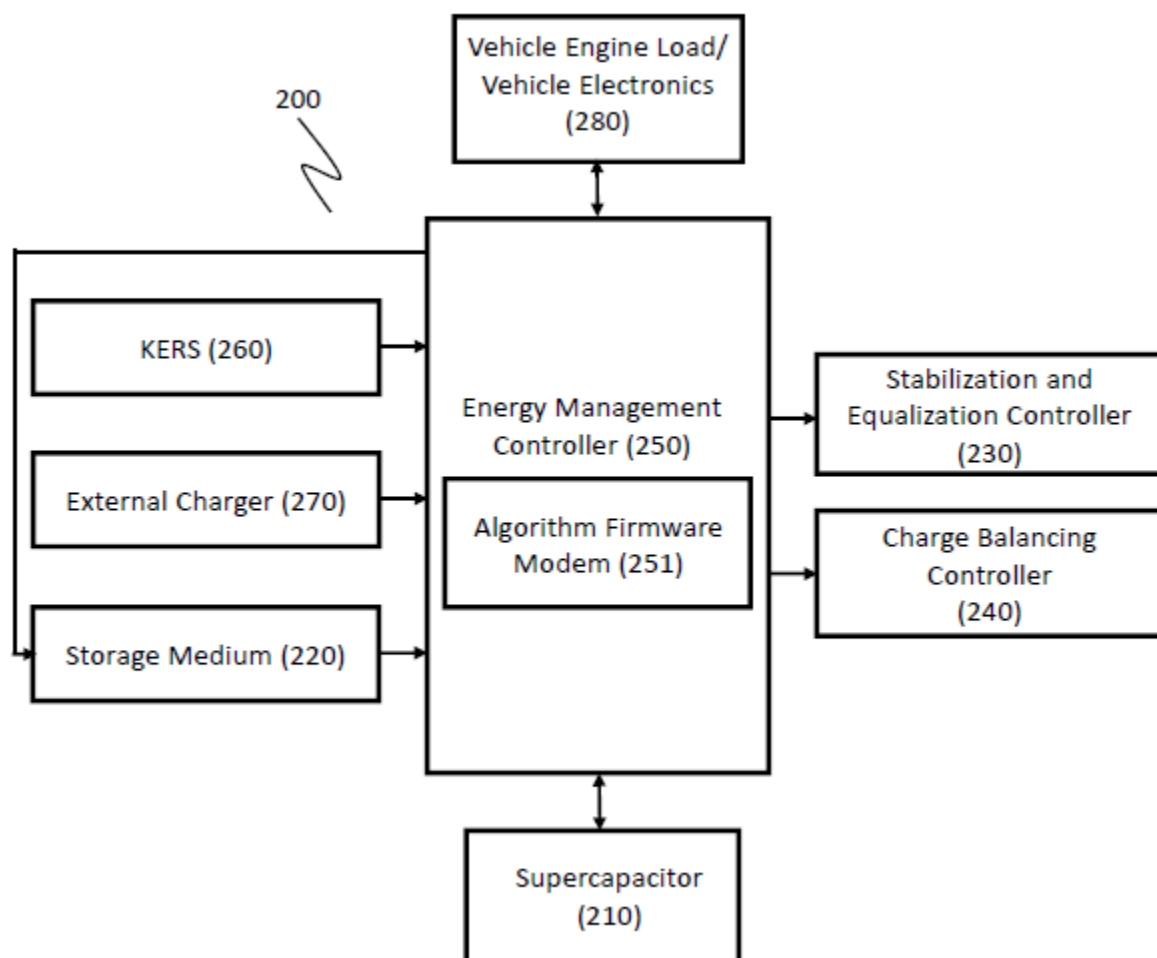


Fig. 9

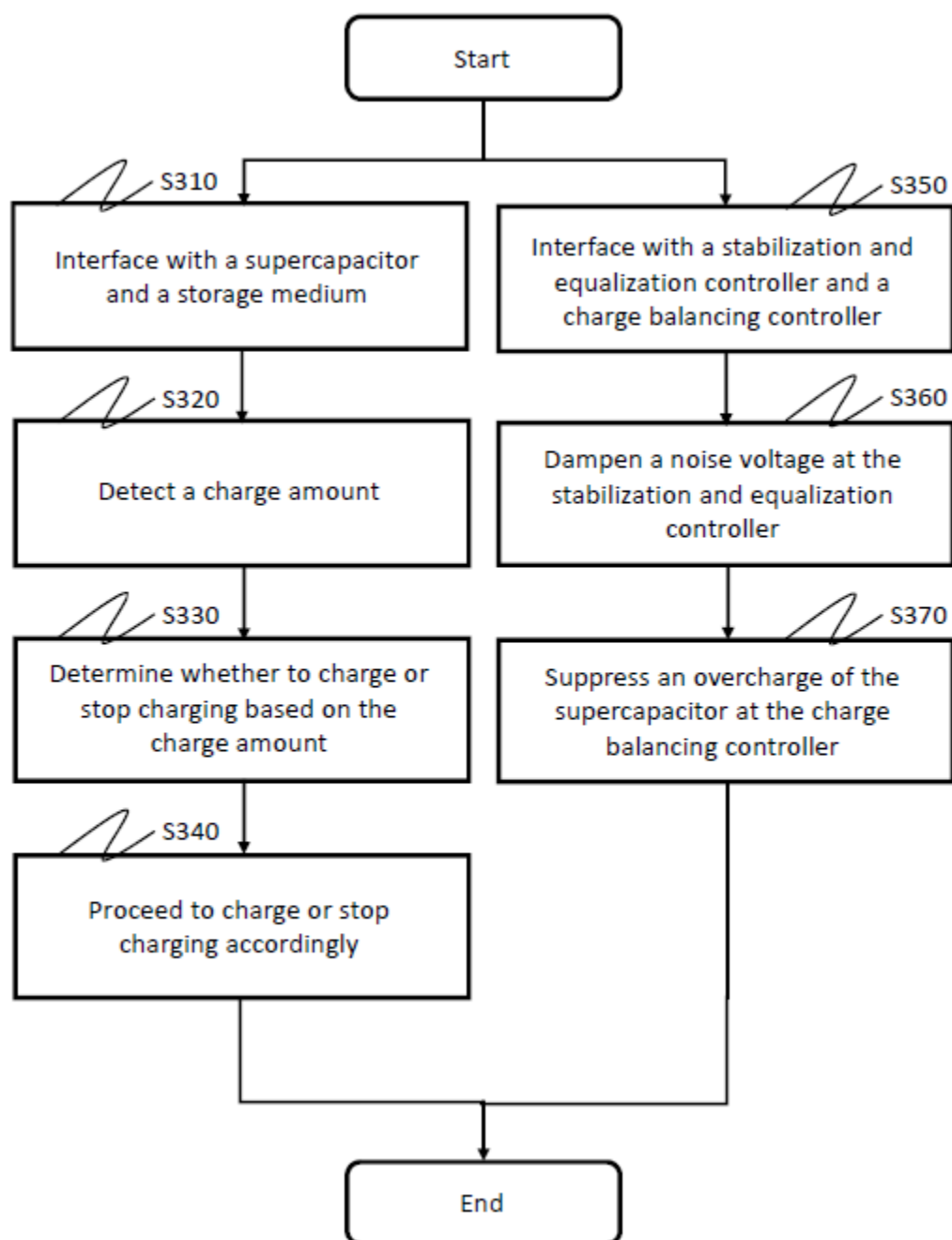


Fig. 10

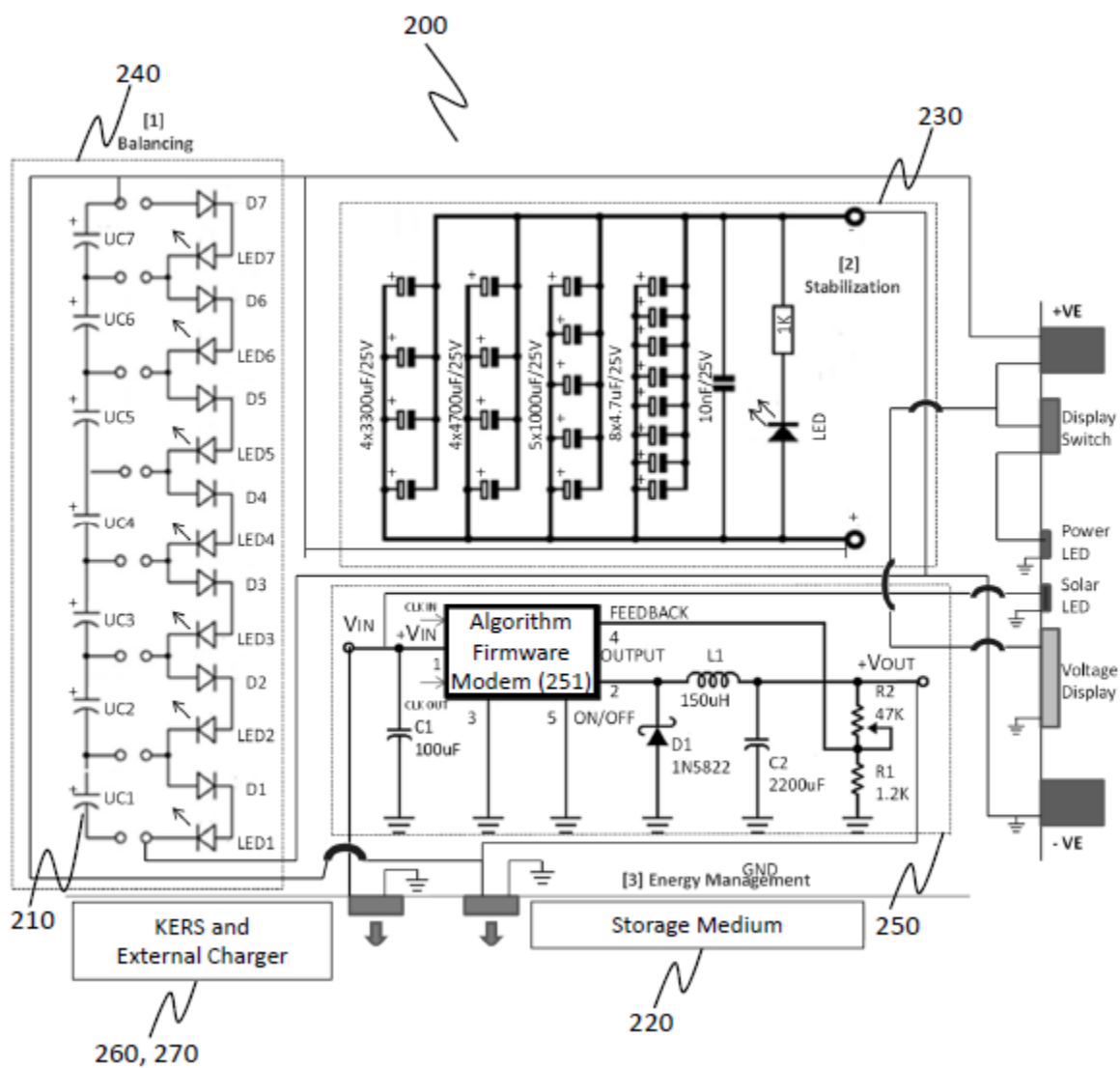


Fig. 11

Balancing [Voltage Balancing Circuitry Components]	
Component	Values
Ultra Capacitor	600 Farads 2.7Volt
Zener Diode	2.6 Volt Zener
LED	1 Watt
Stabilization [Stabilization and Equalization Circuitry Components]	
Component	Values
Capacitor	3300uF/25V
Capacitor	4700uF/25V
Capacitor	1000uF/25V
Capacitor	4.7uF/25V
Capacitor	10nF/25V
Resistor	1K ohm
Energy Management [Solar Induction Energy Management Circuitry Components]	
Component	Values
Capacitor C1	100uF/25V
Capacitor C2	2200uF/25V
Resistor R1	1.2K
Resister R2	47k
Diode D1	1N5822
Inductor L1	150uH
Algorithm Firmware Modem	PIC Programmable Chip & Supporting Electronic Components

Fig. 12

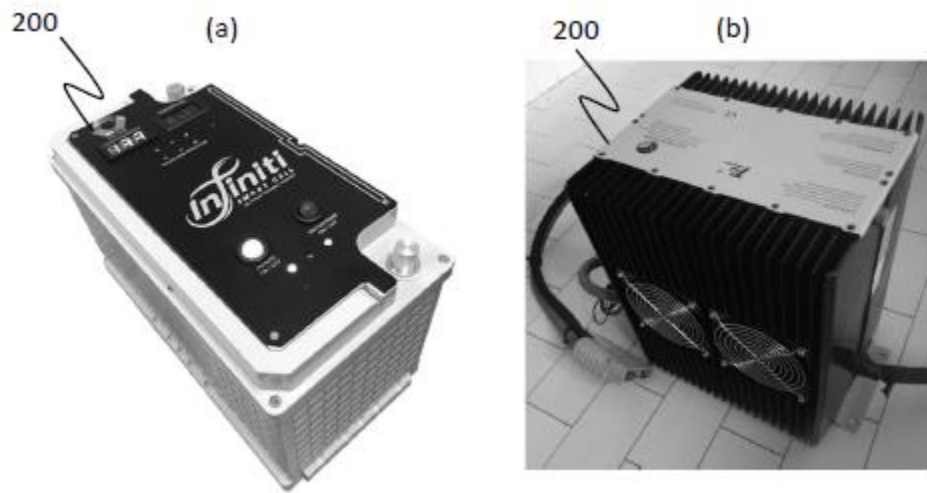


Fig. 13

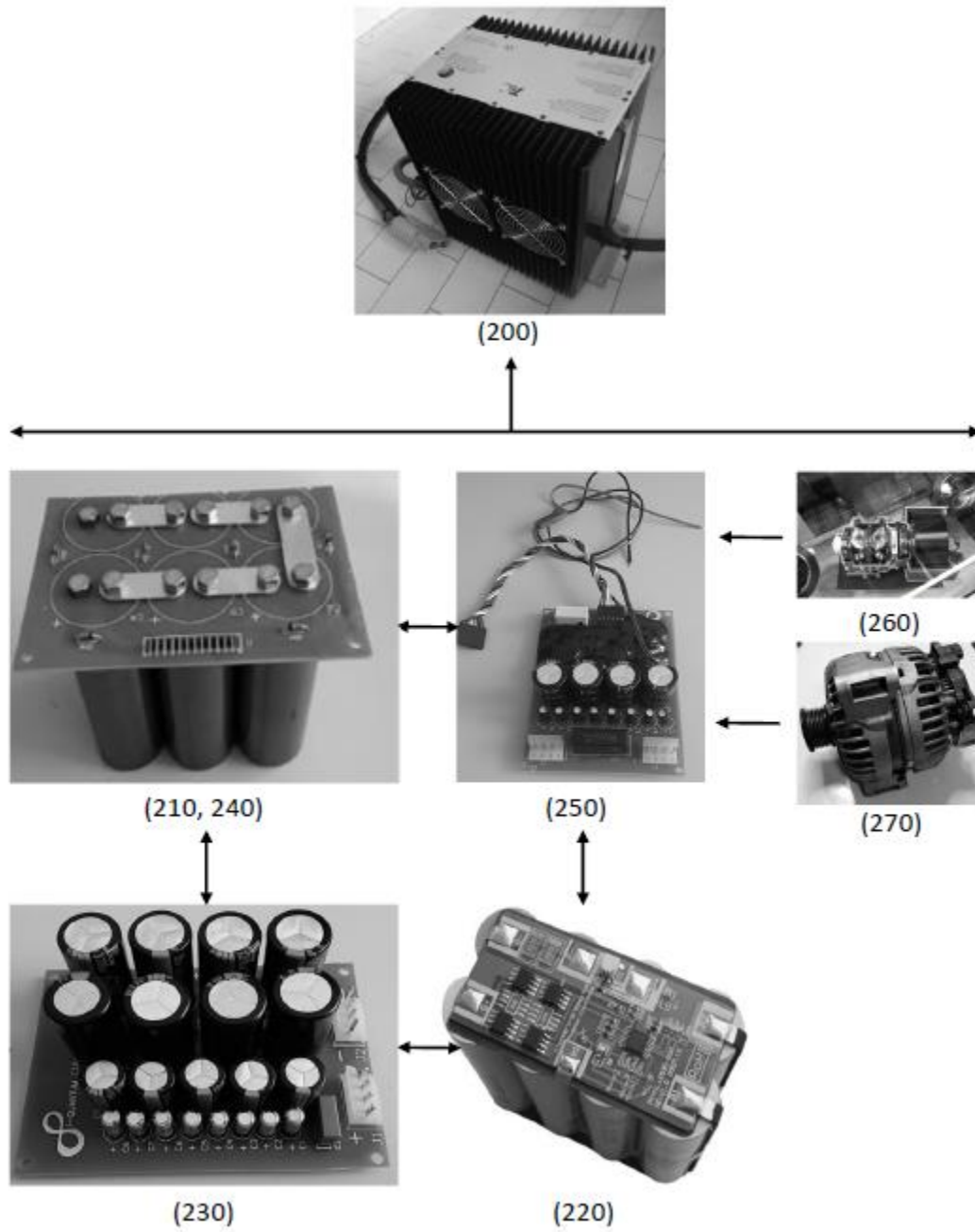


Fig. 14

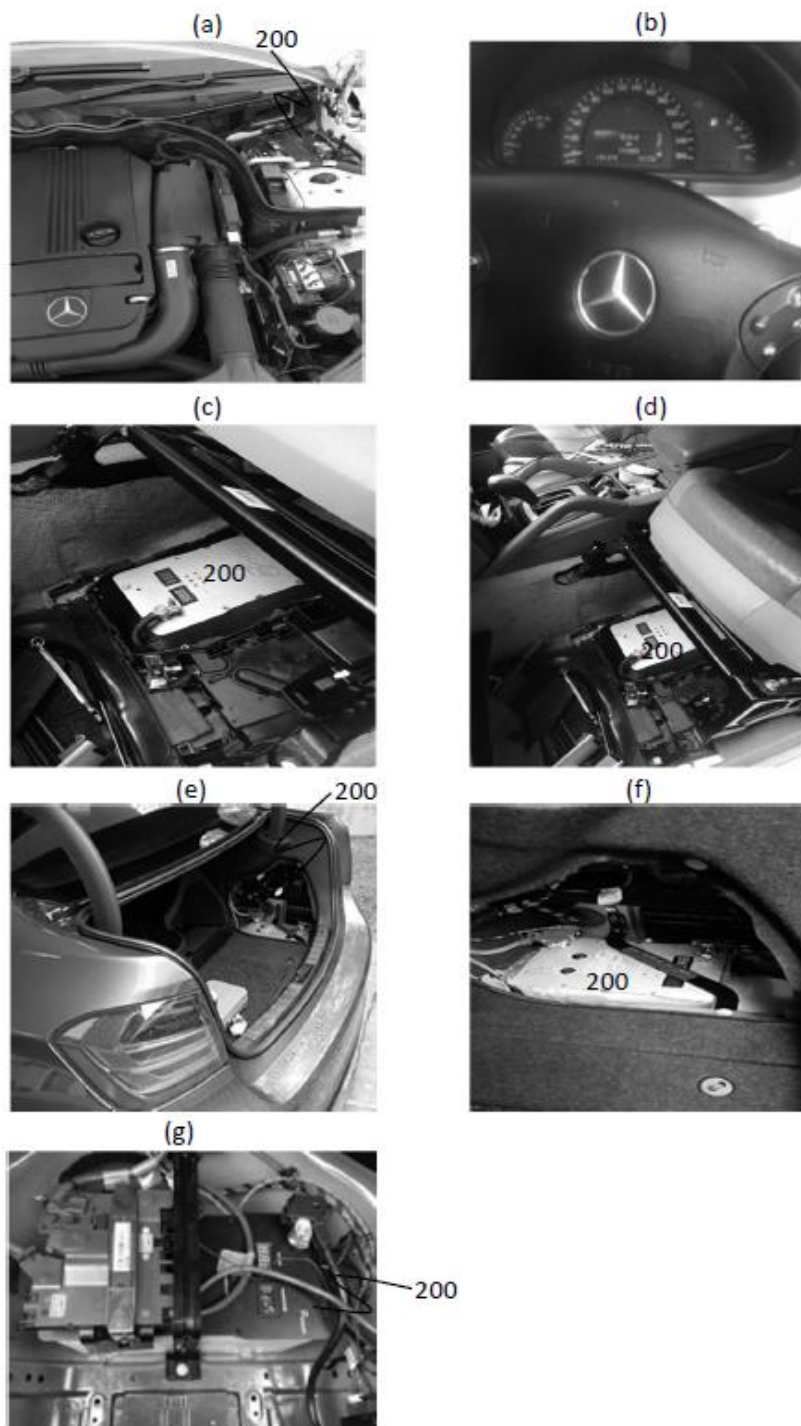


Fig. 15

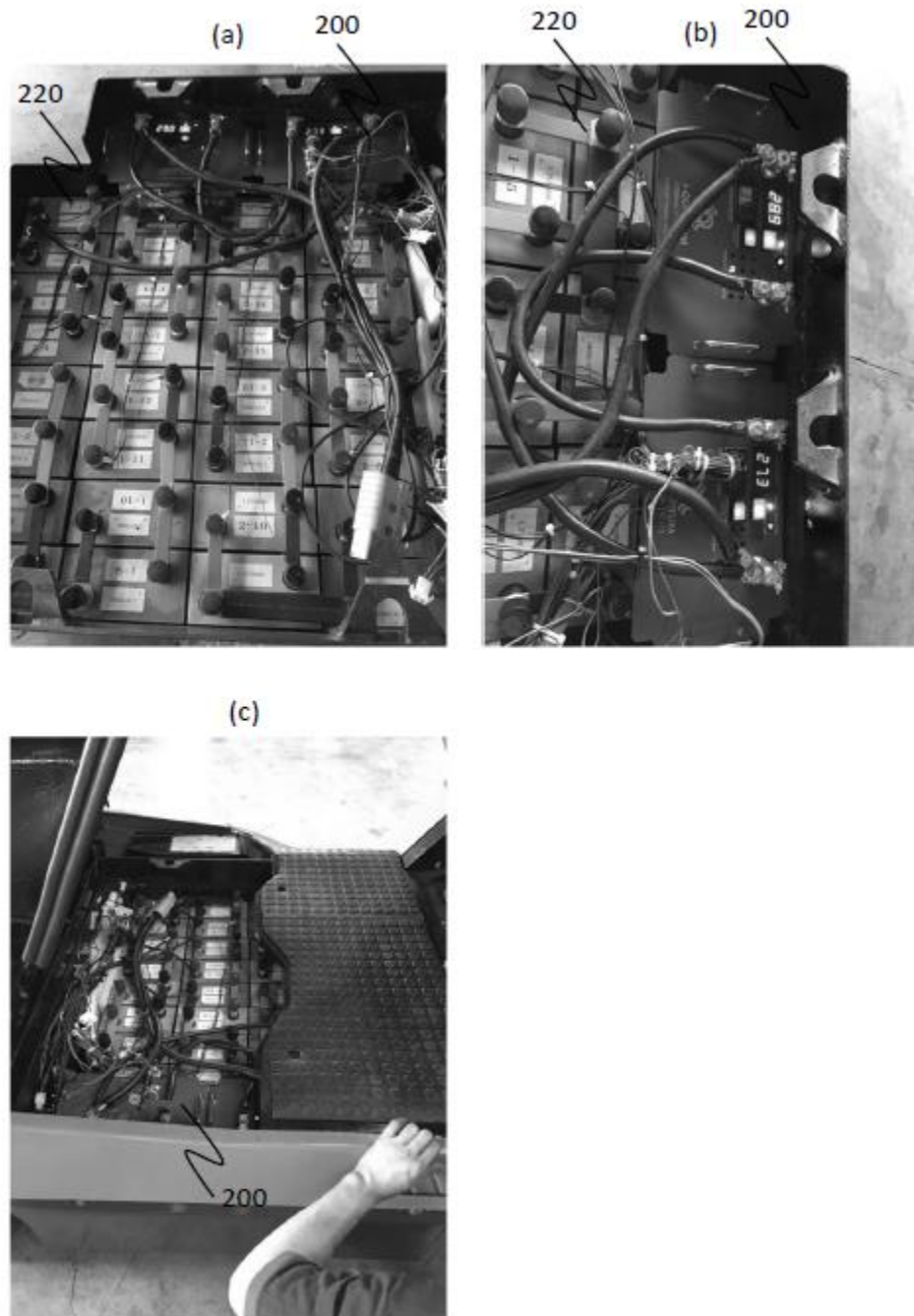


Fig. 16

Technical Features	Lead Acid Battery	Lithium Ion Battery	Smart Battery (Supercapacitor Charge System)
Customized Voltage Range	12-13V	12-13V	16.2V max
Cold Operating Temperature	-20°C	-20°C	-40°C
Hot Temperature	+60°C	+60°C	+70°C (+85°C max)
Cycle Life	300-10,000	500 or higher	1 Million
Calendar Life	1-5 Years	2-3 Years	5-50 Years (Programmed to 5 years)
Specific Power	1,000-3,000W/kg	1,000-3,500W/kg	Up to 10,000W/kg
Charge Rate	<40/x	<60/x	>1,500 C/x
Charge/Discharge Time	Hours	Hours	Seconds
Environmental	Unfriendly	-	Friendly (Carbon Based)
Increase in Power	0	0	8-15%
Reduce Emissions	0	0	20-40%
Fuel Savings	0	0	5-8% (Highway)
Smart Algorithm	No	No	Yes
Real Time (Supply to Engine Demand)	No	No	Yes
Weight	36kg	16kg	9kg
Estimated Cost per year	USD 175	USD 225	USD 150
Estimated Cost (Based on 100Ah Premium)	USD 350 for 2 years	USD 900 for 4 years	USD 600 for 4 years

Fig. 17

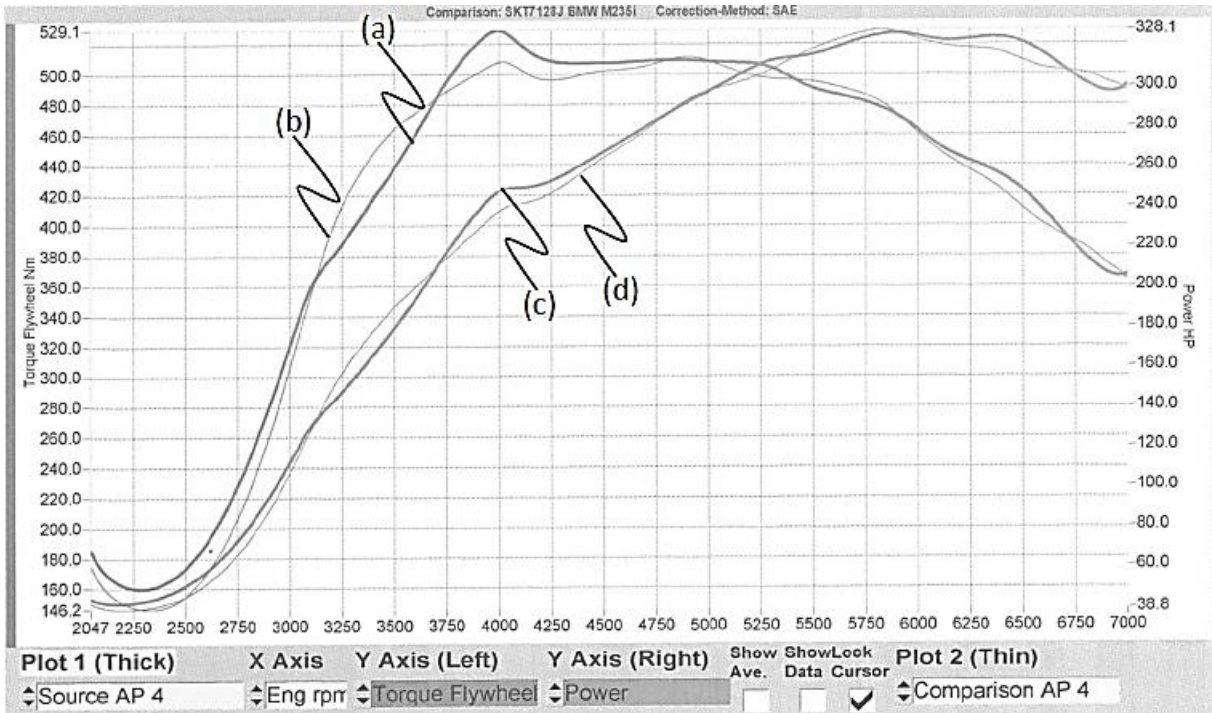


Fig. 18

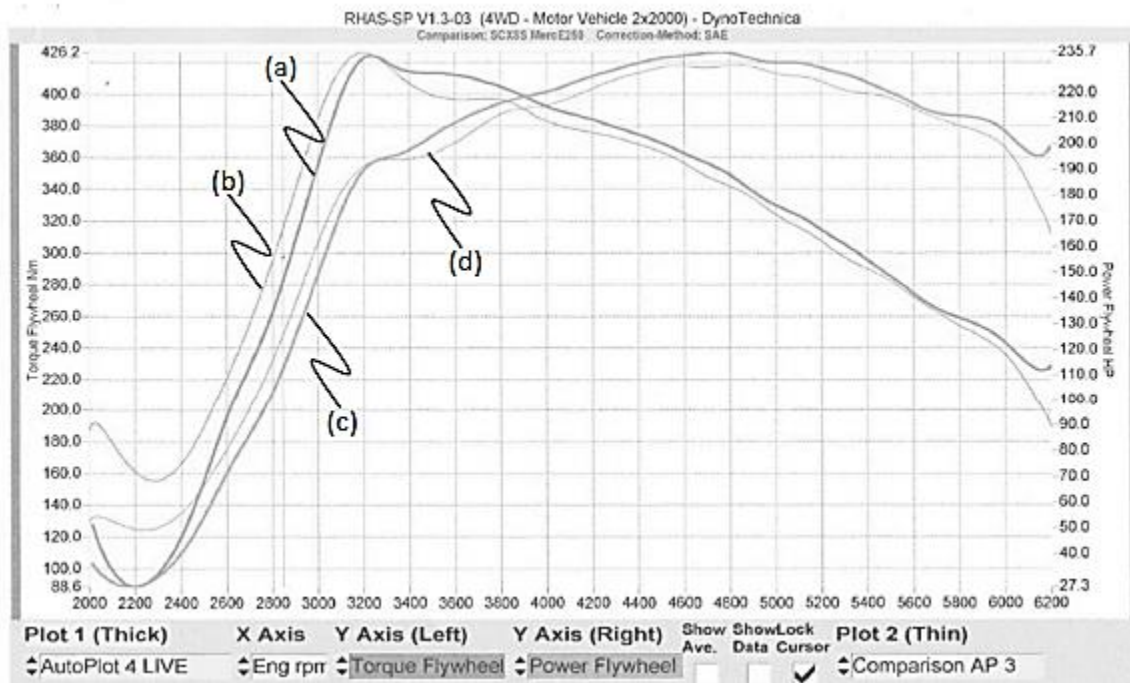


Fig. 19

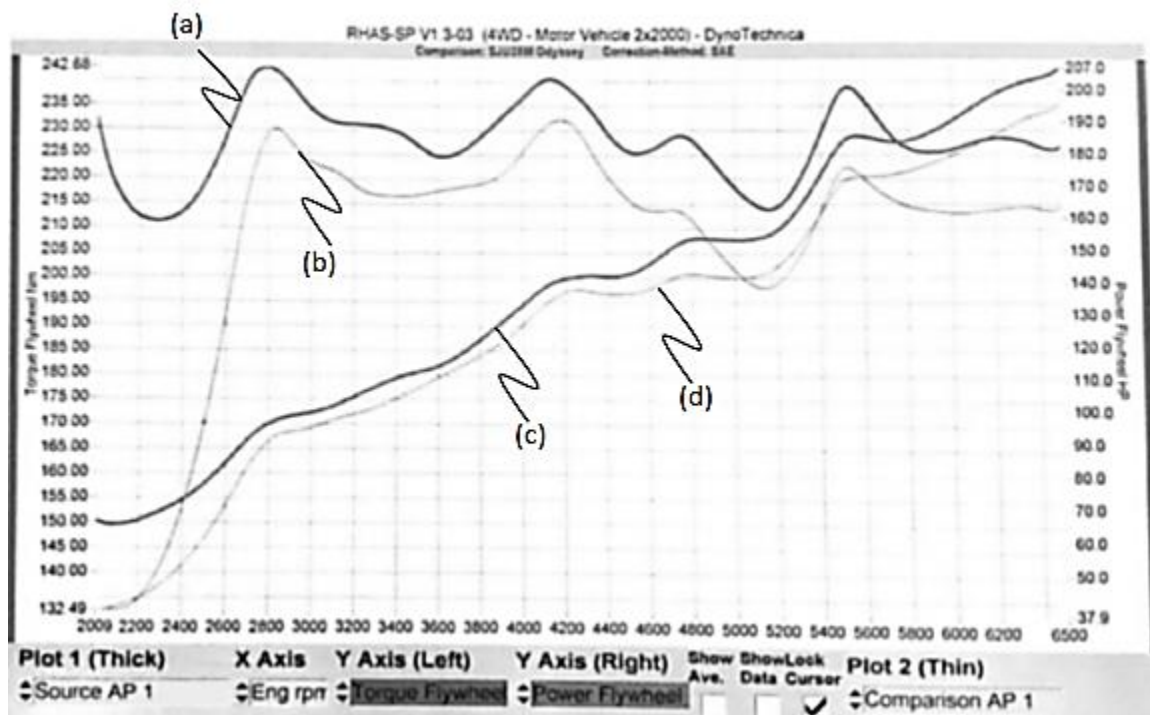


Fig. 20

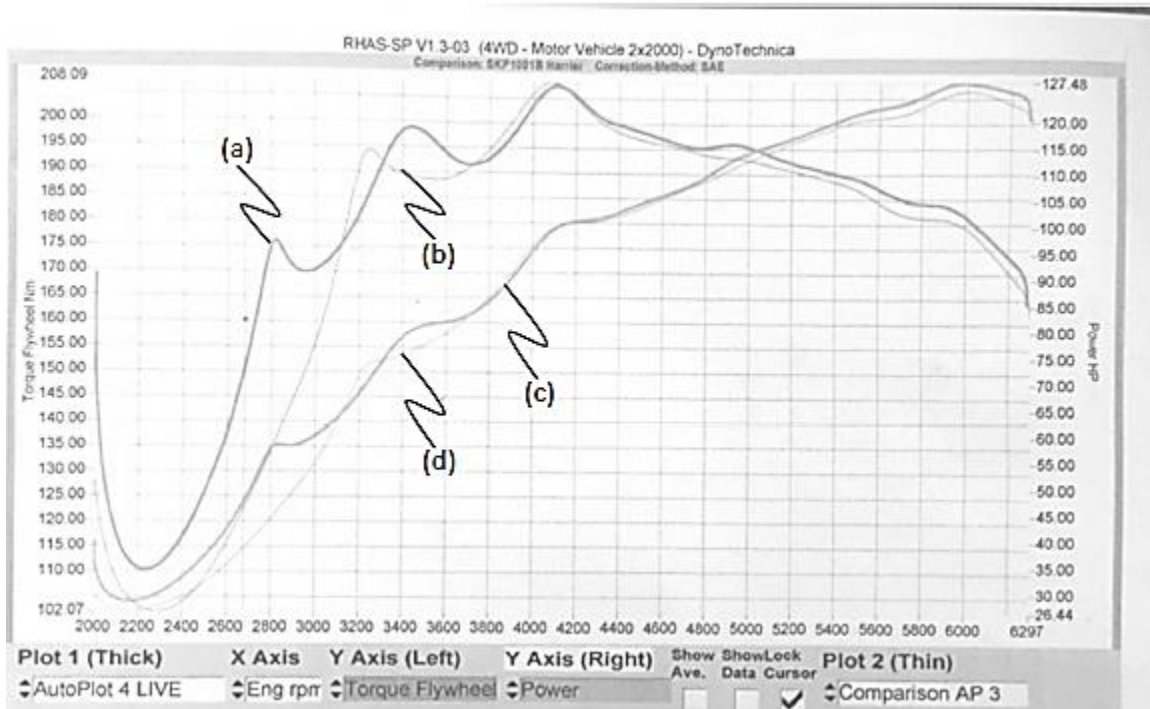


Fig. 21

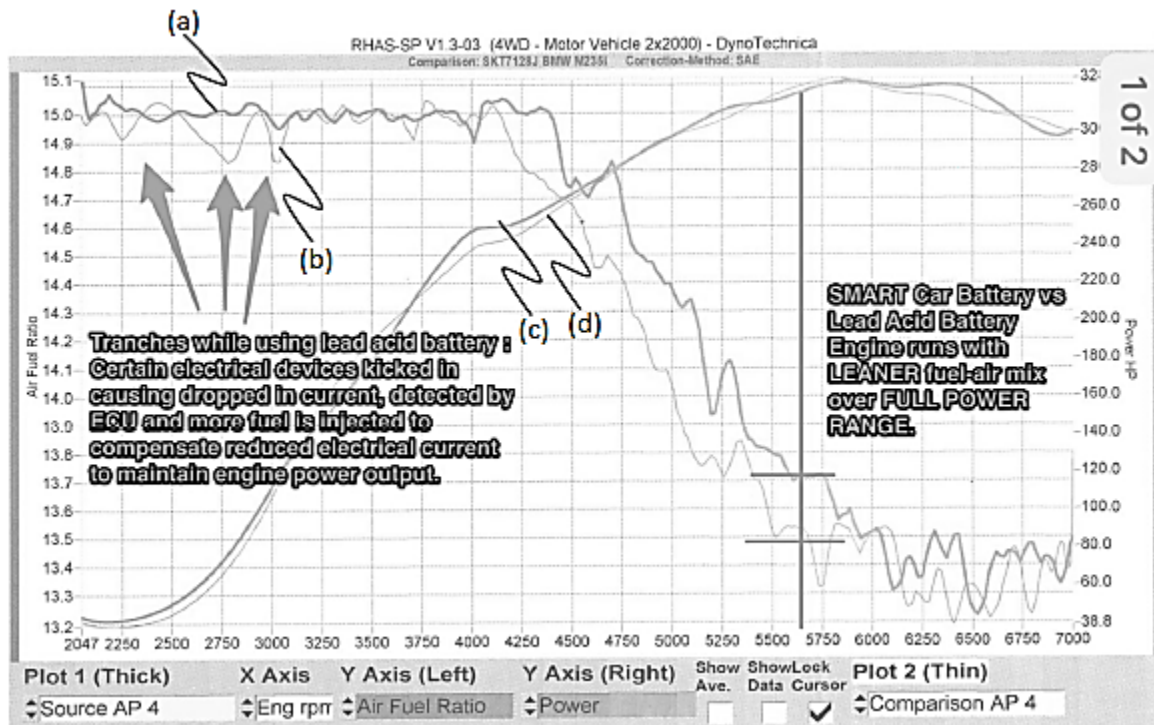


Fig. 22