



**精进电动**

***Winning with the Best from China and U.S.***

***Jing-Jin Electric's Electric Motor Technology  
Collaboration With Fisker Automotive***

***Ping Yu, Chairman & CEO, Jing-Jin Electric***

***Intellectual Property, Innovation and Investment in Clean Energy:  
Exploring US-China Perspectives  
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## JJE Vision

***World's Best Electric Motors***  
for the Electrification of Automobiles

**JJE Electric Motors for Fisker Karma  
175kW Generator and 150kW Traction Motor for Fisker Karma**

- **Fisker Karma – World's first luxury EV with extended range**
- **Three high power electric machines on board**
  - **One generator, 175kW**
  - **Two traction motors, 150kW**
- **Industry's leading single machine output**
- **Industry's leading power density and NVH performance**
- **Designed and manufactured in China**



## eMotor Applications for Fisker Karma



**Traction Motors**



**Generator**

**Short Video about JJE's Motor Design &  
Production for Fisker Karma**  
精进电动菲斯科电机研发、生产的视频



## Industry Leading eMotor Output

### Rated Power



**Fisker Karma  
JJE eMotors**

**150kW Traction  
175kW Generation**

**Chevy Volt  
eMotors**

**111kW Traction  
60kW Generation**

**CODA EV  
eMotors**

**100kW**

**Nissan Leaf EV  
eMotors**

**80kW**

## JJE eMotor vs. Competition

	<u>Competitor</u>	<u>JJE</u>
Crash Safety	X	✓
Top Speed	X	✓
NVH	X	✓
Power	OK	Better
Weight	OK	Better
Cost	OK	Better

## A Win-Win Technology & IP Collaboration

- **JJE develops enabling eMotor solutions for Fisker Karma from ground up**
  - **China's competitiveness in manufacturing and resource (e.g. rare earth) transfers into highly competitive cost structure**
- **Fisker Automotive co-invests in the eMotor development**
- **JJE and Fisker Automotive jointly market & sell the eMotors into other market segments**
  - **China's competitiveness in manufacturing and resource (e.g. rare earth) enabled highly competitive cost structure**
- **JJE benefits from greater volume produced and sales profit; Fisker Automotive receives "reverse royalty"**

# JJE: Creates in China, Serve Global Customers



中国品牌  
中国创造  
中国制造



*Faster. Lighter. Enabling.*

**Thank You**



60 - 120kW  
EV/PHEV Traction Motor



Transmission  
Integrated Hybrid  
Motor System



Commercial Vehicle  
Hybrid Electric  
Traction Motor



150 - 300kW  
High Power EV/PHEV  
Traction Motor



2000-3500Nm  
High Torque eMotor  
For Bus & Truck