



CERAMIC FUEL CELLS LIMITED

Clean power for your home

H.C. Starck



# Volume Supply of Fuel Cells

CFCL collaboration with  
H.C. Starck



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## Today's Announcement

- **CFCL has signed agreements with H.C. Starck of Germany to secure high volume supply of fuel cell components**
- **Supply Agreement**
  - H.C. Starck will make high quality cells, to CFCL's specification
  - Agreed unit prices
  - Supply starts mid 2008, higher volumes and lower prices from 2009
- **Co-operation Agreement**
  - Ongoing technical collaboration to develop advanced solid oxide fuel cell (SOFC) components: High performance, Robust, Long Life Cells
  - Continuous improvement in manufacturing processes
  - Continuous reductions in unit costs
- **Agreements are non exclusive, initial term to December 2011**



## Fuel Cell Scale Up

- **CFCL is developing commercial products with customers and partners in five key markets**
  - Germany, France, UK, Holland, Japan
- **CFCL is also securing the supply chain for volume manufacture**
  - Consistent high quality fuel cells, low unit cost
  - Collaborate to scale up quickly, at lower cost, and lower risk
- **Partnership combines CFCL's SOFC expertise with H.C. Starck's manufacturing expertise & facilities**
- **Long term fixed unit costs**
  - Certainty for financial modeling, mitigates supply chain risk





## H.C. Starck

- **Leading global supplier of metal and ceramic powders, special chemicals, advanced ceramics and refractory metals components**
  - Broad range of products, including fuel cell components
  - 3,500 employees at 13 production sites in Europe, North America and Asia
  - Revenue of €985 million
- **Making solid oxide fuel cell materials since 1996**
  - Acquired InDEC in 2003
- **Fuel cell operations in Selb, Germany**
  - 900 m<sup>2</sup> facility, 20 staff
- **State of the art facilities**
  - Continuous tape casters, automated screen printers, clean rooms, slurry and paste preparation, sintering furnaces, quality control
  - ISO 9001 and 14000 certified
- **Capacity of 1.4 million fuel cells per year**
  - Invested more than €10 million since 2000, plans to invest more to expand capacity