Battery start-up QuantumScape to list via Spac deal

Solid-state cell maker backed by VW and Bill Gates valued at $3.3bn

QuantumScape says its technology improves the energy storage of a lithium-ion battery, while also having the potential to be safer and cheaper © QuantumScape

Financial Times *- Henry Sanderson in London, Patrick McGee in San Francisco and Joe Miller in Frankfurt – September 1st, 2020*

QuantumScape, a battery start-up backed by Volkswagen and Bill Gates, is to go public on the New York Stock Exchange as it seeks to commercialise a technology it says could almost double the range of an electric car. The company, which was spun out from Stanford University in 2010, said it would merge with Kensington Capital Acquisition Corp in a deal valuing it at $3.3bn. It said it would raise $700m through the transaction, including a $500m sale of shares to investors including Fidelity and Janus Henderson. It would be the highest-profile listing of a US battery company since A123 Systems, which went public in 2009 before filing for bankruptcy in late 2012. QuantumScape's backers include Silicon Valley investors Kleiner Perkins, Khosla Ventures and Bill Gates' Breakthrough Energy Ventures.

Its biggest shareholder is VW, which has invested more than $300m in the company in a partnership the carmaker has said is aimed at "industrial-level production of solid-state batteries" as it seeks to build 22m electric vehicles within the next decade. The battery company is led by Jagdeep Singh, a computer scientist and entrepreneur. The start-up says its technology offers a significant improvement on the energy storage of a lithium-ion battery, while also having the potential to be safer and cheaper. Its cells use a ceramic solid electrolyte rather than a liquid one, as in most conventional lithium-ion batteries. They also contain **a lithium metal anode rather than a graphite one,** which allows the battery to store more energy. Solid-state batteries have been the focus of battery start-ups over the past decade but have never been used in electric cars. Dyson's electric car project used such cells, but the company pulled the plug on the vehicle last year.

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Simon Moores, an analyst at Benchmark Mineral Intelligence, said that despite QuantumScape's technology he did not expect solid-state batteries to be in electric vehicles until after 2030, and that they would probably be used in drones first. "The EV is the harshest environment for a battery to go into," he said. "That's the challenge. Solid-state lithium metal is the future but they need to prove it."

QuantumScape said it would have $1.15bn in cash after the merger and that it was looking to scale up its cell production and build a new factory. By 2028 it aims to make enough batteries for 910,000 vehicles a year, it said. It is one of a number of investments made by VW, the world's largest carmaker, as it attempts to gain a foothold in the new electric car economy. VW last May said it would spend €1.1bn to acquire a 26 per cent stake in Shenzhen-listed battery manufacturer Gotion High-Tech, making it the company's biggest shareholder. The Wolfsburg-based carmaker is also building battery cell facilities in Germany, in conjunction with Sweden's Northvolt, and has a partnership with China's CATL.