GET (3519TT) was Granted Patent for Proprietary Technology of Etching and Surface Roughening on Solar Wafer

We would like to share with you that GET (3519TT) was granted patent by Taiwan Patent and Intellectual Property Office for the Company's invention on "Etching Solution and Method of Surface Roughening of Silicon Substrate." The etching technology, along with next generation diamond wire manufacturing, enables GET to increase multi-crystalline wafer efficiency and decrease cost following previous patents of wafer slicing technology.

The wet etching and surface roughening technologies are estimated to raise wafer efficiency by 0.4% the highest, pushing GET high-efficient wafer to reach 19.5% the highest with PERC, and 18.4% the averaged. With 140um diamond slicing technology GET developed, polysilicon loss will be 10% further to reduce. Considering the equipment lead time and manufacturing advancement at cell side, the wet etching technology estimated to be available in 2017.

Usage of copper wire with slurry has been widely adopted in wafer slicing production, while diamond wire is expected to be next stream in view of its higher durability and throughput. As tier one wafer producer, GET develops proprietary technologies in both copper wire and diamond wire processes. The smooth diamond sliced wafer could be too shining hence reduce its power generation, and diamond wire stress could make micro damages on wafer too.

GET develops wet etching technology of proprietary formulated solution along with accurate timing and temperature control, to roughen wafer surface evenly and remove minimal damages simultaneously. Etched wafers will be further cleansed and dried while solution will be on-line recycled.

The invention "Etching Solution and Method of Surface Roughening of Silicon Substrate" has been granted patent in Taiwan, and under review process in China.

Thank you for your attention.