



NEWS RELEASE

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Silicon Genesis Announces its Second Generation PolyMax™ Production Equipment for Thin Solar Wafering

SiGen completing tests to qualify its high volume manufacturing kerf-free wafering equipment design

March 19, 2012 – San Jose, CA – Silicon Genesis, a leader in process and technology for engineered substrates and pioneer of beam-induced solar cell wafering, announced today that it has finalized the specifications of its second-generation production system for fabricating thin-silicon solar wafers. The system design is a result of over 6 years of development, prototype testing and solar cell material evaluation with numerous equipment and solar cell partners. The new GenII PolyMax™ system comes after many industry firsts for SiGen, including first to make *free-standing* 20um (micron), 50um, 85um, 120um, and 150um of 125mm and 156mm industry standard square *kerf-free* monocrystalline silicon solar-cell wafers. These achievements delivered the first true mono c-Si kerf-free wafering for the PV industry.

The introduction of the PolyMax high volume manufacturing system brings the industry one step closer to replacing wire saw processes with a lower cost waste-free wafering solution. A key strength of the PolyMax system is its ability to produce wafers thinner than is achievable with wire saw technology, allowing the industry to produce cells with higher conversion efficiencies and lower cost.

Francois Henley, president and CEO of Silicon Genesis said: “We believe that the solar industry’s severe pricing pressure further strengthens the proton beam-induced wafering approach. We first introduced our beam-induced cleaving technology at the 2008 PVSEC Conference with 50um thick wafers made using a prototype 2 million volt high-energy proton implanter. We believe the benefit of using our technology will significantly cut the cost of making high-efficiency solar cells, allowing the PV industry to reach unsubsidized grid parity years ahead of expectations. These thin and ultra-thin solar wafers have been well characterized and tested, both by our partners and independent third party laboratories.”

Asked about recent press releases of other thin-silicon technology providers, Henley responded: “These recent announcements further confirm the need for new approaches and processes that can cut costs in making high-efficiency silicon absorbers. We evaluated the Ampulse hot wire CVD technology while it was still at NREL in 2006 in combination with a SiGen layer-transferred single-crystal silicon layer.

We opted for our direct high-energy beam-induced cleave approach instead. The approach has merit if the company can indeed make high-quality films using their novel textured backing technology. We are also closely following recent announcements by Twin Creeks Technologies of a process similar to our beam-induced wafering except it is reportedly limited to bonded (non free-standing) 20um films. As the pioneers of beam-induced wafering and assuming it is not utilizing any of our technology embodied in our 100+ US patent portfolio which we are monitoring, SiGen is happy to see another company recognizing the importance of thin crystalline silicon for its capability to dramatically reduce the cost of solar cells. The fact that Twin Creeks Technologies was founded by a venture capital firm shortly after it evaluated SiGen's beam-induced wafering business plan and technology, including our prototype 2 million electron volt implanter is of concern."

SiGen's beam-induced wafering will not only serve the solar market. The core technology is capable of supplying thin high quality materials to other nascent industry requirements in HB-LED and packaging/3D structures utilizing Silicon, GaAs, Germanium, SiC, GaN and Sapphire. The key advantage is minimizing the cost of high performance materials while maintaining their effectiveness in demanding end applications.

About SiGen

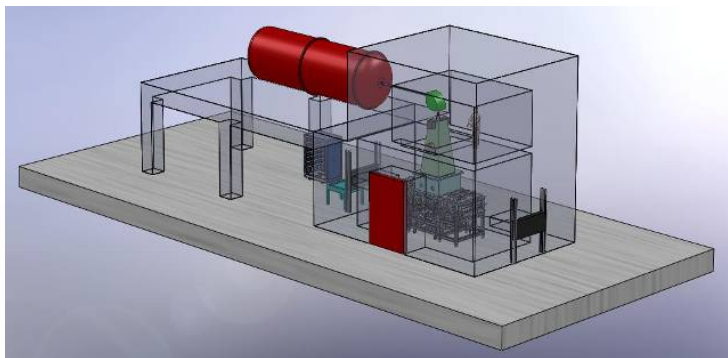
Silicon Genesis Corporation (SiGen) is a leading provider of engineered substrate process technology for the semiconductor, display, optoelectronics, and solar markets. SiGen's technology is used for production of Silicon-On-Insulator (SOI) semiconductor wafers for high performance applications. SiGen develops innovative substrates through thin-film engineering, enabling new applications and markets for its customers. SiGen's customers and partners include top players from substrate and device suppliers throughout the world. Founded in 1997, SiGen is headquartered in San Jose, California. For more information on Silicon Genesis, visit <http://www.sigen.com>



20um Silicon Wafer (2009)



High-Energy Proton Implanter Prototype (up to 150um)



GenII Proton Implanter Design