Alamo Inventors℠

3D Printing: Lessons From The Inventor Of Selective Laser Sintering

Dr. Carl Deckard

The original four 3D Printing processes were invented in the late 1980s. Three of the four original processes; Stereolithography (liquid photopolymer), Fused Deposition Modeling (extrusion) and Selective Laser Sintering (powder bed fusion) are the dominant processes in the industry today. Each of these processes was conceived in the United States by an individual inventor and developed by a small group.

Dr. Deckard will speak about the evolution of the Selective Laser Sintering (SLS), lessons learned and the future of 3D Printing with an emphasis on the advantage to the individual inventor.

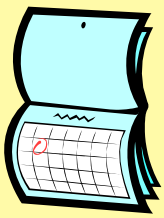
SLS is a novel manufacturing process that fabricates solid 3D objects from a CAD model by building up the object in layers by melting a powder together with a laser beam. Dr. Deckard will bring some of the original components he build with the SLS process.

During undergraduate school at the University of Texas (UT), Mr. Deckard actively worked on SLS and the Deckard Engine. After several years of conceptual work, the concept for SLS came together during Deckard's last semester of undergraduate school.

Mr. Deckard secured UT funds to build a demonstration unit for his Master's Degree Thesis after demonstrating the basic feasibility of SLS. Deckard continued to work on SLS for a Ph.D. Deckard convinced UT to file for patents on SLS and teamed with associates to found Nova Automation (later DTM) which licensed the rights to SLS patents from UT in 1987 and subsequently, secured financing to commercialize SLS in 1988.

As a postdoctoral fellow at UT, Dr. Deckard worked with a team to design, build and test the next generation SLS machine built at UT and later, an off campus SLS machine shown at Autofact '89. Dr. Deckard continued to work on SLS machines, process and materials at DTM culminating with the launch of the Sinterstation 2000 in 1993. He has further continued to enhance SLS and work on a novel method of making polymer powders for powder bed fusion 3D Printing processes.

Also, please take this opportunity to pay your annual dues ($25/$95 Corporate), thanks!



Wednesday, February 14, 2018

5:30-6:30 Networking 6:30-8:00 PM - Presentation

San Antonio Museum of Science & Technology

102 Mabry Drive, San Antonio

Website & MAP

Public Invited

Alamo Inventors, a Special Interest Group (SIG) of Technology Connexus Association, is a non-profit organization made up of local area engineers, business people, professionals, students, faculty and people from all walks of life. Anyone interested in inventing and/or business and product development is welcome to attend and become a member.

For more information visit:

www.alamoinventors.org