

Protecting America's Future

Y-12 National Security Complex

Technology Transfer

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What is Technology Transfer?

- Intellectual property can be created while performing work under the M&O contract with DOE
- DOE allows the contractor, B&W Y-12, to retain title to certain inventions
- Through review and certain considerations Y-12 may decide to file patent applications on certain technologies
- Technology Transfer occurs when a company is identified who wants to license a technology from Y-12 and commercialize it

Why Do Technology Transfer?

- National Policy – Stevenson-Wydler Act, 37 USC 3710
- Required by Y-12's Prime Contract with DOE - (DE-AC05-00OR22800 I.153(a)(1) defines TT as a Y-12 mission
- Raise our Prestige and Stature – Recognition
- Recruit and Retain the Best and the Brightest
- Royalties allow Technology Maturation Projects
- Fosters partnerships, collaborations, and work for others
- Win-Win
 - We earn royalties through licensing
 - Promote Economic Development
 - Licensee with end product is a source for Y-12 procurement



Ways to work with Y-12

- Licensing – transfer of commercial rights to the private sector
- Memorandums of Understanding (MOUs) – Defining up front goals and good faith intentions
- Cooperative Research & Development (CRADA) – R&D projects of mutual interest
 - With licensing agreements to support making the invention ready for the commercial market
 - As a means of mutual problem solving
- Work for Others – we do problem solving, make prototypes using our unique resources
- Mentor-Protégé agreements – assistance to small disadvantaged firms

<http://www.y12.doe.gov/business/socioeconomic/mentor.php>

Partnerships

- Other Nuclear Weapons Complex sites to improve the Stockpile Stewardship Program
- Federal agencies to provide technological assistance and products
- Industry, universities, and laboratories to develop the solutions necessary to keep the United States competitive in the world marketplace
- Mutual relationship with Universities
 - Massachusetts Institute of Technology
 - Utilization of MBA Students for market studies and business cases
 - University of Tennessee (Knoxville and Chattanooga) members of NIST Manufacturing Extension Partnerships (MEPs)
- Federal Laboratory Consortium
- Association of University Technology Managers

Number of Technologies Available

<http://www.y12.doe.gov/business/techtransfer/>



Access Rate Control System (ARCS)



Rapid Deployment Shelter System



New Technologies

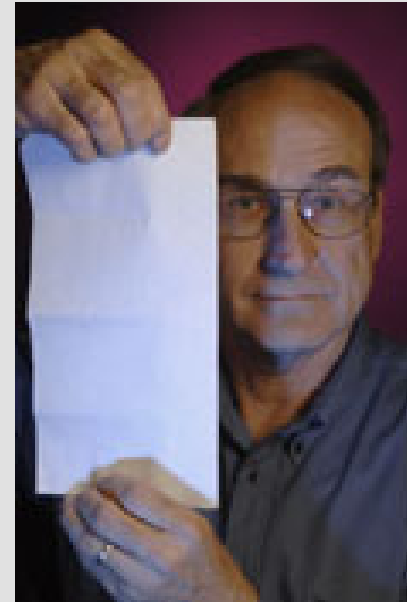


- Microwave Processing of Materials
 - Heating
 - Sintering
 - Melting/Casting
 - Curing

- Infrared heating of metal alloys
- New alloy and materials development

The Negligible Residue Tack Cloth

- Developed for cleaning Beryllium contamination
- Cleans to non-detect level (0.01 $\mu\text{g}/100$ sq. cm.)
- Leaves no residue
- Doesn't feel sticky
- Environmentally friendly “green” solvent and tackifier
- SIMW_YPES™



Rapid Deployment Shelter System

Shelter In a Box



- Deploys in minutes
- Fully equip able 400 ft² facility
- Medical or base-of-operations applications

Questions?

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