Soup to Nuts: 
How NASA Technologies Got Transferred to the Marketplace Via a Live Intellectual Property Auction

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Presentation Overview

• NASA’s Innovative Partnerships Program
• Licensing NASA Owned Patents
• The Auction Process
• Observations
What is the Innovative Partnerships Program?

• What we do
  – Facilitator
    • Bring parties together (inside and outside)
    • Bridge communication gaps
  – Catalyst
    • Implement new things = Change agent
    • Create new partnerships
    • Demonstrate new approaches and methods

• How we approach an issue
  – Always add value to Agency priorities and objectives
  – “Yes we can, if…”
  – Win-Win-Win
    • NASA–partner–taxpayer/public good
  – Complementary interests (1+1>>2)
IPP Within the NASA Organization

**Mission Directorates**
- Aeronautics Research
- Exploration Systems
- Science
- Space Operations

**NASA Centers**
- Ames Research Center
- Dryden Flight Research Center
- Glenn Research Center
- Goddard Space Flight Center
- Jet Propulsion Laboratory
- Johnson Space Center
- Kennedy Space Center
- Langley Research Center
- Marshall Space Flight Center
- Stennis Space Center

**Mission Support Offices**
- Chief Financial Officer
- Chief Information Officer
- General Counsel
- Integrated Enterprise Management Program

**Innovative Partnership Program (IPP) HQ and Center Offices**
- External Relations
- Chief Health and Medical Officer
- Institutions & Management
- Strategic Communications

**Office of the Administrator**
- Administrator
- Deputy Administrator
- Associate Administrator

**Chief of Staff**

**Inspector General**

**NASA Advisory Groups**

**Chief Safety and Mission Assurance**

**Program Analysis and Evaluation**

**Chief Engineer**

**Program & Institutional Integration**

**Chief of Staff**

**Inspector General**

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NASA IPP’s National Network

http://ipp.nasa.gov/field_centers.htm
IPP Program Elements

- Technology Infusion
  - Small Business Innovation Research (SBIR)
  - Small Business Technology Transfer Research (STTR)
  - IPP Seed Fund

- Innovation Incubator
  - Centennial Challenges
  - FAST
  - Innovation Transfusion
  - New Business Models

- Partnership Development
  - Intellectual Property Management
  - Technology Transfer
  - New Innovative Partnerships
NASA Commitment to Tech Transfer

• Founding legislation requires NASA to disseminate its activities and results
  – Benefits the taxpayer
  – Benefits the U.S. economy
  – Benefits our quality of life
NASA Spinoff Highlights

- Memory (Temper) foam
- Eye-tracking technology used in LASIK
- DeBakey Heart Pump
- Freeze-dried food
- DHA- and ARA-enriched baby formula
- Imaging technology for needle biopsies for breast cancer
- Robots used to keep soldiers safe in Iraq and Afghanistan
NASA’S Standard Licensing Process

• Fully/Partially exclusive or nonexclusive licenses to NASA technology
  – Additional transfer support via partnership

• Governed by 37CFR 404
  – Commercialization Plan required
  – Federal Register Notice & comment period required for exclusive license
  – US & small business preference

• Negotiated at responsible Field Center

• http://ipp.gsfc.nasa.gov/lic-partnerships.html
Some NASA Metrics

FY07 Agency-wide:
Total New Licenses - 40
Total Patent Applications - 108

Agency-wide Average (5-year):
Total Agency Licenses - 65
Total Patent Applications - 123

Agency Active Patents ~ 900

GSFC Patent Applications (FY08) - 27
Our Partnership with Ocean Tomo

• Aligns OT’s core business practice with IPP’s mission of seeking innovative partnering opportunities

• Benefits
  
  – For NASA: A new, unique, and innovative path to the marketplace for targeted technologies
  
  – For Ocean Tomo: Opportunity to offer NASA’s rare, high-potential opportunities

  – For public: Rapid access to cutting-edge space-program technology
Obstacles & Challenges

• Misperceptions

• Buyer apprehension
  – First time this has been tried
  – Wary of Government

• Federal Register Notice & comment period

• Exit strategy for Ocean Tomo

• Valuation Strategy
The Auction Licensing Process

- Joint Ocean Tomo & NASA selection of patents
- Ocean Tomo submits application for exclusive license
- NASA posts Federal Register Notice and resolves any comments
- Exclusive license executed with Ocean Tomo
- Exclusive license transferred to winning bidder
Results

• 3 NASA lots auctioned on October 30, 2008, in Chicago, IL
  – 1 Lot sold at auction
  – Strong expectations for post-auction sale of 1 lot, and perhaps both

• Other NASA Field Centers to follow
• Significant Media interest
Observations

• Federal Labs are underutilized IP resource
  – 250 federal gov’t R&D labs, agencies and research centers
    • $100 billion annual budget
    • > 100,000 scientists & engineers
    • FY07 Inventions disclosed: 4,486
    • FY07 Patent apps filed: 1,824
    • FY07 Patents issued: 1,406

• Public auction an efficient mechanism & meshes with government fairness principles

• Intermediaries, such as Ocean Tomo, will play a major role in future federal tech transfer

NOTE: All IP data are preliminary - from a final report to be published fall 2008
Thank you!

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