



DOE IP Counsel



IP for ARPA-E Awardees

MEITNER Kickoff

December 11, 2018

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Technology Transfer and Intellectual Property

- IP Rights set forth in Attachment 2 of your Cooperative Agreement
 - Patent Rights
 - Pre-publication Review
 - Rights in Data
 - U.S. Competitiveness
 - Flow Down Requirements for Subawardees
- IP Reporting Requirements set forth in Attachment 4
 - Patents
 - Submitted via iEdison
 - Special Requests
 - Submitted to Patent Counsel
 - Utilization Reports

- **DOE** - Atomic Energy Act (42 U.S.C. § 2182) and Federal Nonnuclear Energy Research And Development Act of 1974 (42 U.S.C. § 5908) require that title vests with the Government
- **Bayh-Dole (35 U.S.C. § 200 et seq.)**
 - Applies to R&D “funding agreements” with small business, non-profit, and university contractors
 - Contractor has the right to elect title to **“subject inventions”**
 - “subject invention” means any invention of the contractor conceived *or first actually reduced to practice* in the performance of work under a funding agreement
 - **“Invention”** means any invention or discovery which is *or may be patentable . . .*
 - Contractor must disclose subject inventions to Federal agency
- **Large businesses get similar rights only if DOE waives its title**
 - ARPA-E uses class waivers so that Awardees typically don’t have to seek out individual waivers (cost-sharing, U.S. competitiveness, etc.)

- To obtain title, Awardees must report the **subject invention** within a specified timeframe.
 - iEdison
- Contractor may then elect to retain the entire right, title, and interest throughout the world to each **subject invention**
- Federal Government retains certain rights
 - Government use license
 - March-in rights
 - U.S. Preference

**FAILURE TO DISCLOSE OR ELECT MAY CAUSE THE AWARDEE
TO LOSE TITLE TO THE INVENTION**

This is a win-win: Awardee gets to retain title and commercialize, and the Government gets a concrete ROI (the license and US Manufacturing) for the taxpayer. DOE/ARPA-E wants the Awardee to retain title; we want our ROI.

Type of Entity	Initial Invention Disclosure Requirement
Small Business/ Non-profit	Awardee must disclose each Subject Invention to DOE within 2 months after the inventor discloses it internally
Large Business	Awardee must disclose each Subject Invention to DOE within 2 months after the inventor discloses it internally or if earlier within 6 months after awardee becomes aware that a Subject Invention has been made

- **CONSULT YOUR PATENT COUNSEL**
- Potential subject inventions may be discussed in:
 - Visits / Presentations to ARPA-E
 - Quarterly Reports
 - Final Technical Reports
 - Other Publications
- Phrases that can be used that should trigger the question “Should we report that as a subject invention?”
 - “We discovered...”
 - “We solved [the problem] by...”
 - “We met the milestone of...”
 - “We developed a process to...”
 - “We achieved an improvement of X by doing Y.”
 - “We filed a patent application for...”
 - “We’re presenting at [conference/tradeshow/etc.]...”
 - “We’re publishing in [journal/trade magazine/etc.]...”

- Gives the Government right to use the invention royalty-free for government purposes.
- Awardee must include a Government Interest Statement in any patent application/patent to indicate the government support and rights.
- Awardee must also submit a Confirmatory License so that the government rights are formalized. We have a form...

CONFIRMATORY LICENSE

Title of Invention:

Inventor(s):

Patent Application Serial No:

Filing Date :

Patent Number:

Issue Date:

Name of Contractor (*i.e. Contractor, Subcontractor, Grant, or Cooperative Agreement, as applicable*):

DOE Contract No. (*i.e. Contract, Subcontract, Grant, or Cooperative Agreement, as applicable*):

DOE Case No.: S-

Contractor Docket No.:

March-in rights – Government can require the contractor, assignee, or exclusive licensee to grant license where:

- Contractor or assignee has not taken, or is not expected to achieve practical application of the subject invention
- Necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor . . .
- Necessary to meet certain requirements for public use . . .
- Non-compliance with U.S. Preference clause

March-in Rights have never been exercised.

SECTION B. INVENTION STATUS

1. Provide a brief update on the invention's development since your last report. For example, is the invention concept-only, prototype, or in the process of scale-up?
2. Provide a brief description of your efforts to commercialize and market the invention.
3. What is the date of the invention's first commercial sale or use in public?
4. What are the gross sales revenues to date for products embodying the invention or processes that incorporate the invention?
5. For licensed inventions, provide the amount of gross royalties to date.
6. If the invention has been assigned to another entity, please provide the name of the entity and any fee for the assignment.

SECTION C. BENEFITS TO U.S. ECONOMY AND U.S. MANUFACTURING

7. List activities conducted in the U.S. that support the commercialization of the subject invention (e.g. research and development, administration, manufacturing).
8. Provide an approximate number and description (e.g., sales, manufacturing, engineering) of U.S.-based jobs that support the commercialization efforts related to the subject invention.
9. Provide a list of manufacturing plants or facilities with locations that use the subject invention or manufacture or assemble products that embody the subject inventions.
10. If a U.S. Manufacturing Plan was submitted as part of the application for the Agreement under which the subject invention was made, describe how the development and commercialization efforts further that Plan.

SECTION D. LICENSING EFFORTS

11. During this reporting period, what was the total income received as a result of license or option agreements related to the subject invention?
12. During this reporting period, did any entity (e.g., contractor, licensee) request a waiver of any U.S. manufacturing requirements related to the subject invention?
If yes, how many waivers were obtained?
13. During this reporting period, how many exclusive licenses or options for the subject invention existed?
14. What is the number of domestic manufacturing licenses for the subject invention?
15. During this reporting period, how many non-exclusive licenses or options for the subject invention existed?
16. During this reporting period, how many licenses or options of any type to small businesses (<500 employees) are active?

Contracts determine the timing of filing Utilization Reports. Typical scenario is annually for 5 years after the contract ends.

FAQs for Awardees

- Do we have to report an invention if we decided not to pursue patent protection or discontinue pursuing a patent application? **Yes.**
- Do we have to report a new invention disclosure if we file a continuation, continuation-in-part or a divisional patent application? **Yes.**
- If I filed a patent application prior to the award, could that invention be a subject invention? **Maybe.** If the invention were first actually reduced to practice during the award, the invention could be a subject invention. Consult your patent counsel.
- If I disclose an invention in a quarterly or final report, is that sufficient reporting? **No.** The invention must be reported in iEdison.
- What is a DOE S-number and how do I get one? The DOE S-number is the DOE docket number assigned to a particular invention. Each invention is assigned a unique DOE S-number to be used in DOE's invention tracking system. Once an invention is reported in iEdison, DOE assigns an S-number and updates the iEdison record. Note that iEdison automatically assigns a "T-number", and the T-number is not the same as the S-number.

Supplemental Slides



A Timeline of DOE IP and TT Authorities/Mechanisms DOE IP Counsel

Atomic Energy Act of 1946

Established the AEC and give vested all title to inventions with the US Gov. unless waived. Also provides DOE “work for others” authority



1946

1974

1980

1986

1989

2005

2011

2017

Federal Nonnuclear Energy & Development Act of 1974

Established ERDA and continued the AEC concept of vesting all title to inventions with the US Gov. unless waived

Stevenson Wydler Act of 1980

Required **Labs** to take an active role in technical cooperation and sets a portion of labs budgets for tech transfer

Bayh-Dole Act of 1980

Granted SB, Nonprofits and Universities the right to elect title to inventions they develop with federal funds (this right was extended to M&O contractors in 1984)

Federal Tech Transfer Act of 1986

Provided GOGOs the authority to enter into CRADAs

National Competitiveness Tech Transfer Act of 1989

Provided GOCOs the authority to enter into CRADAs and made Tech Transfer a mission of DOE Labs

EPACT 1992

Extended CRADA like protection to information generated from certain programs

EPACT 2005

Provided DOE with Other Transaction Authority, established the TCF, DOE Tech Transfer Coordinator role etc.

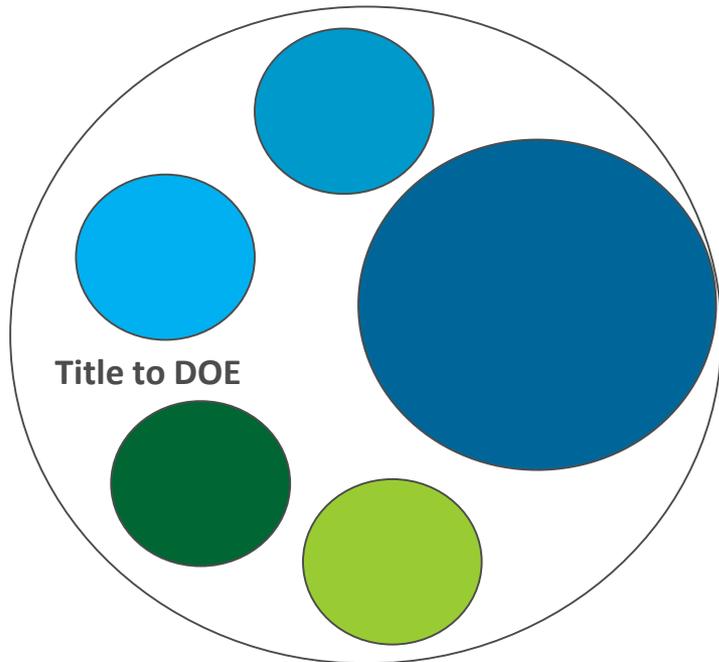
Agreements for Commercializing Technology (ACT)

DOE established the ACT pilot mechanism

Agreements for Commercializing Technology (ACT)

DOE makes ACT a permanent mechanism and authorizes a Federal ACT pilot





- Non-Nuclear Energy Act 42 USC 5908** (and/or Atomic Energy Act 42 USC 2182)
- Bayh-Dole Act 35 USC 201 et seq** (covers domestic SB and non-profit entities under federal funding agreements)
- SPP/WFO Class Patent Waiver** (covers non-federal sponsors using private funds)
- CRADA Statutes 15 USC 3710, 3710a as amended** and CRADA Class Patent Waiver for DOE Labs
- User Facility Patent Waivers**
- ACT Class Patent Waiver**

Government may obtain title where:

contractor fails to disclose or elect title within the times specified, or elects not to retain title;

in those countries in which the Contractor fails to file patent applications in a timely fashion;

in any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

If Contractor fails to file or does not elect, Contractor retains a revocable nonexclusive royalty-free license throughout the world. Contractor must request a license from the Government if the Government takes title when Contractor fails to report in timely fashion.

- **DOE** - Atomic Energy Act (42 U.S.C. § 2182) and Federal Nonnuclear Energy Research And Development Act of 1974 (42 U.S.C. § 5908) require that title vest with the Government
- **NASA** – Under the Space Act (51 U.S.C. § 20135) title vests with the Government

- DOE and NASA funding agreements with large businesses where title vests with the Government, and the contractor retains a revocable, non-exclusive royalty-free license
 - (“-13” clause (DOE); “New Technology Clause” (NASA). However, NASA and DOE usually waive title.
- Specific Exceptions (e.g. DOE Naval Nuclear Propulsion Laboratories)
- “Exceptional Circumstances”

U.S. Preference 48 CFR 52.227-11 - exclusive right to use or sell any subject invention in the United States, if:

- agree that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States, unless;
 - reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States, or
 - domestic manufacture is not commercially feasible.

ARPA-E U.S. Manufacturing Requirement for Worldwide Sales

- Based on a 2013 Declaration of Exceptional Circumstances, most ARPA-E awardees regardless of type of entity must agree to U.S. manufacturing of all products embodying a subject invention or made using a subject invention process for sales anywhere in the world.
- This requirement is made part of the Cooperative Agreement via a U.S. Manufacturing Plan submitted by the Awardee and approved by ARPA-E.

Types

- Advance Waivers – inventions that may be conceived or first actually reduced to practice in the course of a particular contract
- Identified Waivers – invention already made
- Class Waivers – class of persons or class of inventions

Scope

- Waivers may be granted for a particular field of use, duration of time, or geographical location
- U.S. Competitiveness, March-in rights, Government use license