

The logo for FISH, consisting of the word "FISH" in a bold, white, sans-serif font, followed by a small blue square.

The Role of Intellectual Property for Defense Contractors

November 16, 2023

Meet the Speakers

Thomas Rozyłowicz

Principal



rozylowicz@fr.com

Matthew Colvin

Principal



colvin@fr.com

Joel Henry

Principal



jhenry@fr.com

Thomas Halkowski

Principal



halkowski@fr.com

Agenda

1. Industry perceptions and challenges
2. Landscape of IP in defense
4. No shortage of innovation
5. Timeframe of IP relative to the patent system
6. Licenses
7. Patent rights with the Government
8. Litigation
9. Remedies and objectives

Industry Perceptions and Challenges

This is sometimes heard in the defense and contracting communities

- “Don’t bother pursuing intellectual property because innovators will be compelled to grant compulsory licenses”
- “Nobody in the defense industry pursues IP”
- “Even if you did pursue patents, innovators do not have effective remedies”

Sometimes heard in the tech community (non-government)

- “Government moves slow”
- “No potential for high growth”
- “Not innovative as commercial sector”

All these stereotypes and perceptions lead to problematic decisions!

Litigation: Headlines Involving Defense Contractors

- “NASA Told to Pay Boeing \$28.3M In Patent Case”
- “DOD, Boeing Attack Drone Patents in \$40M Row”
- “DOJ To Pay \$75M in Honeywell Night Goggle Settlement”
- “Government Must Pay \$12.5 in Boeing, AATI Drone IP Row”
- “DOD Fires on \$16M for Ammo Infringing At Federal Circuit”

Landscape of Defense Contractors

- Who is a defense contractor?
 - A defense contractor, as defined by the Code of Federal Regulations, is “any individual, firm, corporation, partnership, association, or other legal non-Federal entity that enters into a contract directly with the DOD to furnish services, supplies, or construction” (see 32 C.F.R. 158.3, “Definitions”).
- Size-Vary from 1000s of contactors to small corporations

| Company | Ranking | Contract Obligations |
|-----------------------------|---------|----------------------|
| Lockheed Martin Corp. | 1 | \$45.61B |
| Raytheon Technologies Corp. | 2 | \$25.7B |
| General Dynamics Corp. | 3 | \$21.93B |
| Pfizer Inc. | 4 | \$16.67B |
| The Boeing Co. | 5 | \$14.48B |
| Northrop Grumman Corp. | 6 | \$13.81B |
| Humana Inc. | 7 | \$7.74B |
| HII Corp. | 8 | \$6.49B |
| L3Harris Technologies Inc. | 9 | \$6.45B |
| BAE Systems PLC | 10 | \$5.17B |

Profile of Large Defense Contractors

| Defense Contractors | Active, Worldwide Patent Families | Active U.S. Patents |
|-----------------------|-----------------------------------|---------------------|
| Lockheed Martin | 2,400 | 2,899 |
| Raytheon (RTX) | 19,035 | 24,921 |
| Northrop Grumman | 1,665 | 2,193 |
| Boeing | 13,667 | 15,448 |
| BAE Systems | 2,082 | 1,873 |
| L3Harris Technologies | 2,016 | 2,303 |
| Rheinmetall GMBH | 1,206 | 291 |
| Airbus | 9,872 | 6,786 |
| Honeywell | 12,408 | 14,064 |
| Elbit Systems | 462 | 365 |

| Defense Contractors | Active, Worldwide Patent Families | Active U.S. Patents |
|-----------------------------------|-----------------------------------|---------------------|
| Thales | 5,671 | 2,644 |
| SAIC (Science Applications Int'l) | 88 | 93 |
| Leidos | 530 | 723 |
| Booz Allen Hamilton | 75 | 102 |
| Dassault Aviation | 179 | 97 |
| Rolls-Royce | 4,043 | 4,515 |
| Naval Group | 182 | 16 |
| General Electric | 19,797 | 18,496 |
| Safran | 12,156 | 6,010 |
| SAAB | 684 | 302 |

Others in Defense/Govt Pursuing Patents

| Defense Contractors | Active, Worldwide Patent Families | Active U.S. Patents |
|---|-----------------------------------|---------------------|
| Parsons Corporation | 26 | 35 |
| ST Engineering | 235 | 193 |
| Oshkosh Corporation | 367 | 560 |
| Aselsan A.S. | 220 | 64 |
| Fincantieri | 86 | 16 |
| QinetiQ Group PLC | 292 | 201 |
| Serco | 32 | 7 |
| AAR Corp. | 13 | 17 |
| Indra [results include Indra Tech and Indra SA] | 289 | 23 |
| Spirit AeroSystems | 301 | 216 |
| Kratos Defense and Security Solutions | 165 | 160 |

| Defense Contractors | Active, Worldwide Patent Families | Active U.S. Patents |
|-----------------------------|-----------------------------------|---------------------|
| Woodward, Inc. | 476 | 385 |
| Nammo AS | 23 | 11 |
| Patria | 7 | 0 |
| Lumen Technologies | 691 | 1,148 |
| MTU Aero Engines AG | 920 | 451 |
| Battelle Memorial Institute | 1,869 | 2,154 |
| SES S.A. | 32 | 15 |
| Hexcel Corporation | 302 | 194 |
| Fujitsu | 22,747 | 12,242 |
| Embraer | 189 | 151 |
| Triumph Group | 16 | 15 |

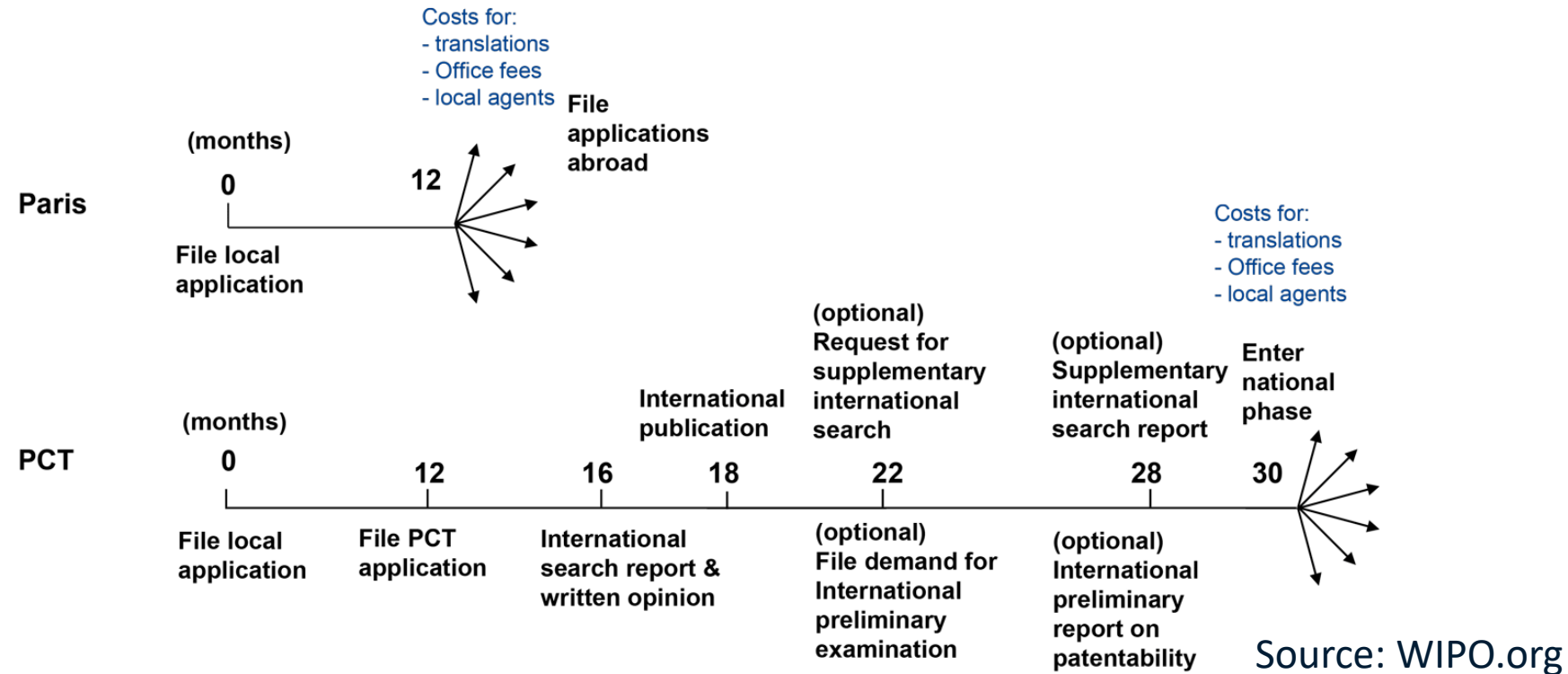
No Shortage of Innovation

- May be tied to economic cycle but countless industries were proven to have a defense industrial base.
- Examples of Technology Initiatives that grew out of DARPA/SBIR Innovation
 - GPS
 - Cyber security
 - The Internet (Countless grants)
 - Personal Voice Assistants
 - Cloud Computing (MIT's Multics)
 - GUIs
- And yet their operations and applicability go far beyond core competencies.
 - Many system manufacturers have equally large software development operations

Timeframe of IP Relative to the Patent System

- **DARPA** grants target three to five-year timeframe
 - Expectation of success within that timeframe (<https://www.darpa.mil/about-us/about-darpa#:~:text=These%20leaders%2C%20who%20are%20at,reasonable%20in%20a%20conventional%20setting.>)
- **Small Business Innovation Research** (or SBIR) program is a U.S. government funding program, coordinated by the Small Business Administration, intended to help certain small businesses conduct research and development (R&D).
 - Funding takes the form of contracts or grants. The recipient projects must have the potential for commercialization and must meet specific U.S. government R&D needs.
 - Approximately \$2.5 billion is awarded through this program each year. DoD is the largest agency in this program with approximately \$1 billion in SBIR grants annually. Over half the awards from the DoD are to firms with fewer than 25 people and a third to firms of fewer than 10.
 - SBIR contracts often allow the small businesses to retain the rights to the intellectual property developed during the project.
- Other grants feature timeframes spanning 6 months to >5 years.
- Naturally coincides with the patent harvesting system.

Timeframe of IP Relative to the Patent System



- The Patent System can be even faster with newly-filed applications granting in under one year (Track 1).
- Other grants feature timeframes spanning 6 months to >5 years.
- **Naturally coincides with the patent harvesting system.**

Competitive Leverage and Licensing Opportunities

- Direct competitors
 - Track 1 examination (Secure a patent in <1 year)
 - Desire immediate leverage
- Upstream/downstream suppliers/customers
 - 2 - 5 year timeframe
- Licensees outside vertical
 - Longer term timeframe/more valuable

Licenses

- Every agreement is a unique balancing act
 - IP is leverage
 - IP is proof of expertise and development work
- Between contractors
 - Paying for development or use?
 - What can be carved out?
 - Protecting or capturing future development?
- With the government
 - Development contracts such as DARPA and SBIR
 - Bayh-Doyle Act

Bayh-Dole Act – Patent Rights

Purpose:

- Prior to Bayh-Dole, contractors and universities did not want to participate in government funded research for fear of losing the patent rights to commercially valuable inventions that would result from the research.
- Government regulations typically required federal contractors to assign inventions to the federal government unless the funding agency determined that the public interest was better served by allowing the contractor or inventor to retain such rights.

Key Provision:

- Bayh–Dole uniformly permits contractors to retain ownership of inventions made under contract and which they have acquired, provided that each invention is timely disclosed and the contractor elects to retain ownership in that invention.

Bayh-Dole Act – Patent Rights

Other Provisions:

- Bayh-Dole automatically grants the United States “a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world.” 35 U.S.C. § 202(c)(4).
- The Bayh-Dole Act defines a “subject invention” as “any invention of the contractor conceived or first actually reduced to practice ***in the performance of work under a funding agreement.***” 35 U.S.C. § 201(e)
- NOTE: Pay particular attention to what is defined as the performance of work under a funding agreement as that may define the scope of what inventions are automatically licensed to the United States.

Litigation: U.S. Court of Federal Claims (“CFC”)

CFC Jurisdiction

- Any claim against the United States for over \$10,000 can *only* be filed in the CFC
- Claims against United States founded on the Constitution, federal statute, or contract
- Patent claim against United States for infringement of an authorized government contractor (i.e., viewed as a government “taking” of a license without compensation and, thus, claim is under 5th Amendment).
- 28 USC §1491 (Tucker Act) (concurrent with District Courts if amount in controversy is \$10,000 or less)

Litigation: U.S. Court of Federal Claims

CFC Overview:

- Parties:
 - All claims in CFC are against the federal government
 - Contractors in patent infringement claims become 3rd party intervenors
- Relief:
 - Only relief available is reasonable royalty damages – no injunctions
 - Contractors often have indemnity obligations to the federal government
- Timing:
 - Cases tend to take longer (3-4 years), if trial is required
 - *But*, judges give each case careful attention & will grant summary judgments

Litigation: U.S. Court of Federal Claims

CFC Advantages:

- Experience and sophistication of judges
- Nationwide jurisdiction and subpoena power
- Flexibility in pretrial scheduling and procedures where appropriate (e.g., bifurcation)
- Professionalism of the bar
- Convenience of the court / e-filing system

Defense Contractor Litigation

- **\$75M Settlement** (C.F.C.). After the government’s lower court victory was overturned, the DOJ ultimately agreed to pay \$75M to settle infringement claims brought by a defense contractor for night vision goggles, and in exchange the contractor agreed to grant the government non-exclusive rights for the goggles in the future.
- **\$15.6M Judgment** (C.F.C.). A defense contractor initially won a \$15.6M judgment against the Army in a case involving lead-free bullets following an 11-day trial, however the decision was overturned on appeal.
- **\$12.5M Judgment** (C.F.C.). An aerospace contractor won a \$12.5M award in this dispute involving a drone launch-and-catch system made for the U.S. DOD.
- **\$28.3M Judgment** (C.F.C.). An aerospace contractor won \$28.3M in a patent suit adverse to NASA pertaining to techniques used in constructing the space shuttle.

| Patent Cases in Key Venues (2000-present) | CFC | DCT | ITC | PTAB |
|--|-----|-----|-----|------|
| Total Cases Involving Top 20 Defense Contractors | 29 | 580 | 30 | 205 |

Source: Docket Navigator, data pulled November 2023

Litigation Activity for Large Defense Contractors

| Defense Contractors | CFC | DCT | ITC | PTAB |
|-----------------------|-----|-----|-----|------|
| Lockheed Martin | 3 | 21 | 0 | 0 |
| Raytheon (RTX) | 0 | 47 | 1 | 41 |
| Northrop Grumman | 5 | 10 | 0 | 0 |
| Boeing | 2 | 37 | 0 | 2 |
| BAE Systems | 3 | 13 | 0 | 1 |
| L3Harris Technologies | 0 | 32 | 0 | 2 |
| Airbus | 0 | 13 | 0 | 2 |
| Thales | 1 | 3 | 0 | 0 |
| KBR | 0 | 1 | 0 | 0 |
| Jacobs | 0 | 1 | 0 | 0 |

| Defense Contractors | CFC | DCT | ITC | PTAB |
|---------------------|-----|-----|-----|------|
| Booz Allen Hamilton | 1 | 1 | 0 | 0 |
| Dassault Aviation | 0 | 1 | 0 | 0 |
| Elbit Systems | 2 | 3 | 0 | 5 |
| Rolls-Royce | 0 | 22 | 1 | 1 |
| Honeywell | 2 | 173 | 14 | 40 |
| General Electric | 0 | 144 | 9 | 83 |
| Hanwah | 0 | 1 | 1 | 0 |
| Safran | 0 | 10 | 0 | 14 |
| SAAB | 0 | 12 | 1 | 0 |
| | | | | |

Remedies and Objectives

- CFC: Only monetary damages under 28 U.S. Code § 1498
 - Remedy shall be by action against the United States in the United States Court of Federal Claims for the **recovery of his reasonable and entire compensation** for such use and manufacture. Reasonable and entire compensation **shall include the owner's reasonable costs, including reasonable fees for expert witnesses and attorneys**, in pursuing the action **if** the owner is an independent inventor, a nonprofit organization, or an **entity that had no more than 500 employees at any time during the 5-year period preceding the use** or manufacture of the patented invention by or for the United States.
- District Court: Normal Patent Damages
 - Reasonable royalty or lost profits
 - Injunction – but sales to government might not be enjoined.



Thomas Rozyłowicz

Principal

rozylowicz@fr.com



Matt Colvin

Principal

colvin@fr.com



Joel Henry

Principal

jhenry@fr.com



Thomas Halkowski

Principal

halkowski@fr.com

Thank You!

Please send your NY/NJ CLE forms to MCLE@fr.com

Any questions about the webinar, contact the Events team eventsteam@fr.com

A replay of the webinar will be available for viewing at fr.com/webinars

FISH.

Copyright 2023 Fish & Richardson P.C. The opinions expressed are those of the authors and do not necessarily reflect the views of Fish & Richardson P.C., any other of its lawyers, its clients, or any of its or their respective affiliates. This presentation is for general information purposes and is not intended to be and should not be taken as legal advice and does not establish an attorney-client relationship.

These materials may be considered advertising for legal services under the laws and rules of professional conduct of the jurisdictions in which we practice. Legal advice of any nature should be sought from legal counsel. Unsolicited e-mails and information sent to Fish & Richardson P.C. will not be considered confidential and do not create an attorney-client relationship with Fish & Richardson P.C. or any of our attorneys. Furthermore, these communications and materials may be disclosed to others and may not receive a response. If you are not already a client of Fish & Richardson P.C., do not include any confidential information in this message. For more information about Fish & Richardson P.C. and our practices, please visit www.fr.com.