R&D Credit Overview and R&D Capitalization Updates

2025 Korean Practice Conference



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Nice to meet you!



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Aprio's R&D Credit Practice

- Aprio calculates **more than $90,000,000 federal and state R&D tax credits** for our clients annually.
- With **35 fully-dedicated R&D specialists** – including CPAs, JDs, Scientists, and Technical Writers
- As one of the largest research and development tax credit practices in the country, Aprio's dedicated research and development tax credit team works exclusively on R&D Tax Credits, providing unparalleled expertise to help clients maximize the benefits of these valuable tax credits
- Aprio is a **fully-integrated CPA firm** which enables our R&D specialists to work alongside colleagues in Aprio's Tax and Assurance practices to ensure a seamless approach with respect to optimizing and utilizing credit benefits.
- Aprio has **more experience than any firm in the US with the payroll withholding aspect** of R&D tax credits.
- Our team has extensive experience **successfully defending federal and state R&D credits during exam.**
- Partner/Director/QC sign-off on all calculations – All R&D Partners and Directors have Big 4 Experience
- Extensive industry experience across a variety of small, medium, and large businesses – including Korean inbound companies!

R&D Deduction (§174) vs. R&D Credit (§41)

- § 174 includes **Global** R&D Costs
- § 41 establishes the R&D Tax Credit;
- § 41 costs are a subsection of § 174 costs related to R&D activities in **U.S.A.**



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Summary of § 174 Tax Law Changes

Activity	Pre-2022	2022 – 2024 (TCJA Years)	2025 and Beyond (OBBBA)
Domestic R&D Costs	Option to either…. • Immediately Deduct (Expense); or • Capitalize & Amortize over 60 or more months	• Mandatory Capitalization and Amortization over **5** Years	Option to either…. • Immediately Deduct (Expense); or • Capitalize & Amortize over 60 or more months (beginning with first month the taxpayer benefits from R&D)
Foreign R&D Costs	Option to either…. • Immediately Deduct (Expense); or • Capitalize & Amortize over 60 or more months	• Mandatory Capitalization and Amortization over **15** Years	• Mandatory Capitalization and Amortization over **15** Years
Software Development Costs	Option to either…. • Immediately Deduct (Expense); or • Capitalize & Amortize over at least 60 months from completion or 36 months from being placed in service.	• Same treatment as Domestic & Foreign R&D Costs	• Same treatment as Domestic & Foreign R&D Costs

Treatment of Previously Capitalized Costs (for 2022-2024)	N/A	N/A	• All Taxpayers:
			  • Option to elect to accelerate the deduction of the remaining unamortized domestic R&E expenses from 2022-2024 into…
			  • the 2025 tax year; or
			  • over a two-year period (2025 and 2026).
			  • Small Businesses ($31M or less in average annual gross receipts): Have the option to retroactively apply the new expensing rules by filing amended returns for 2022, 2023, and 2024.

Case Study 1A – Section 174

- Background:
  - XYZ Software Startup ("XYZ") has 10 employees, all based in the U.S.A.
  - XYZ is a U.S.-based SaaS startup company filing as a C-corporation with 21% tax rate.
  - $1M in average annual gross receipts (qualifies for retroactive OBBBA treatment)
  - Incurred $500,000 of domestic software development labor per year in 2022, 2023, and 2024.
  - Properly capitalized $500,000 of domestic 174 costs in each year, resulting in an increase of $1,050,000 to taxable income between 2022 – 2024…resulting in an aggregate $220,500 increase to tax liability for that time period.
  - Did not include an R&D Tax Credit in its originally filed 2022, 2023, and 2024 returns
- The Solution:
  - XYZ does not want to amend its prior year tax returns and elects to fully deduct the entire unamortized balance of domestic 174 costs ($1,050,000) on its 2025 return, resulting in a reduction of its 2025 tax liability of $220,500.

Case Study #1 (Software Company)				
	2022	2023	2024	Sum of 2022 - 2024
Domestic R&D Spend	$ 500,000	$ 500,000	$ 500,000	$ 1,500,000
Amortization of 2022 Costs	$ (50,000)	$ (100,000)	$ (100,000)	$ (250,000)
Amortization of 2023 Costs		$ (50,000)	$ (100,000)	$ (150,000)
Amortization of 2024 Costs			$ (50,000)	$ (50,000)
Unamortized Balance in Each Tax Year	**$ 450,000**	**$ 350,000**	**$ 250,000**	**$ 1,050,000**
Effective Tax Rate	21%	21%	21%	21%
Tax-Effected Value of Refund	**$ 94,500**	**$ 73,500**	**$ 52,500**	**$ 220,500**

Case Study 1B – Section 174

- Background:
  - XYZ Software Startup ("XYZ") has 10 employees, all based in the U.S.A.
  - XYZ is a U.S.-based SaaS startup company filing as a C-corporation with 21% tax rate.
  - $1M in average annual gross receipts (qualifies for retroactive OBBBA treatment)
  - Incurred $500,000 of domestic software development labor per year in 2022, 2023, and 2024.
  - Properly capitalized $500,000 of domestic 174 costs in each year, resulting in an increase of $1,050,00 to taxable income between 2022 – 2024…resulting in an aggregate $220,500 increase to tax liability for that time period.
  - Did not include an R&D Tax Credit in its originally filed 2022, 2023, and 2024 returns
- The Solution:
  - As a result of the OBBBA, XYZ can elect to retroactively deduct their previously capitalized R&D costs.
  - Additionally, XYZ decides to hire Aprio to conduct a multi-year R&D Tax Credit Study for the three amended returns, resulting in the following tax refund:
    - 2022 – 2024 174 Deduction: $220,500
    - 2022 – 2024 Federal R&D Credit: $ 75,000
    - **Total Combined Refund: $295,500**

Case Study #1 (Software Company)				
	2022	2023	2024	Sum of 2022 - 2024
Domestic R&D Spend	$ 500,000	$ 500,000	$ 500,000	$ 1,500,000
Amortization of 2022 Costs	$ (50,000)	$ (100,000)	$ (100,000)	$ (250,000)
Amortization of 2023 Costs		$ (50,000)	$ (100,000)	$ (150,000)
Amortization of 2024 Costs			$ (50,000)	$ (50,000)
Unamortized Balance in Each Tax Year	**$ 450,000**	**$ 350,000**	**$ 250,000**	**$ 1,050,000**
Effective Tax Rate	21%	21%	21%	21%
Tax-Effected Value of Refund	**$ 94,500**	**$ 73,500**	**$ 52,500**	**$ 220,500**

Common Indicators for R&D Credit Opportunities

- **U.S. manufacturing operations**
- **Engineering** or **software development** activities in the U.S. (performed by employees, contractors, or vendors)
- Current or historical M&A activity
- Taxpayers that have recently (or will soon) come out of NOL positions
- Start-up companies

Qualifying R&D Activity Criteria – "Four Part Test"

TECHNOLOGICAL IN NATURE

Fundamentally relies on principles of:

- ✔ Engineering
- ✔ Computer science
- ✔ Biological science
- ✔ Physical science

PERMITTED PURPOSE

Activity must be intended to develop or improve a business component's*:

- ✔ Function
- ✔ Performance
- ✔ Reliability
- ✔ Quality

ELIMINATION OF UNCERTAINTY

Activity must be intended to discover information to eliminate technical uncertainty related to:

- ✔ Capability or method for developing or improving a product or process
- ✔ Appropriateness of the business component design

PROCESS OF EXPERIMENTATION

Substantially all of the activities must be elements of a process of experimentation:

- ✔ Evaluate one or more alternatives
- ✔ Develop, refine, test or discard hypotheses
- ✔ Trial and error testing, modeling, simulations

Qualified R&D Expenditures

- Employee Wages
- Third-Party Contractors / Vendors
- Materials & Supplies
- Cloud Hosting Environments

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The “Funded Research” Exclusion

- Under U.S. tax law, you cannot claim the R&D tax credit for research to the extent that it is "funded" by an **unrelated** person or entity. This is an important exclusion because its purpose is to ensure that only the person who is truly paying for and benefiting from the research gets the tax credit.
- The IRS uses two key tests to determine if the research is "funded" and therefore ineligible for the credit:
  - **The Economic Risk Test:** Who bears the financial risk if the research fails?
  - **The Substantial Rights Test:** Who retains the rights to the research results?
- General Rule: To claim the R&D tax credit, the Company must meet **both** of these tests. That is, it must bear the economic risk and retain substantial rights to the research results.

The “Funded Research” Exclusion - Examples

- Example 2A. Unrelated third-party “OEM” hires “ABC Supplier” to develop a new steering wheel and the related manufacturing process. OEM agrees to pay “ABC Supplier” on an **hourly basis** (to cover all of ABC Supplier’s costs), regardless of whether the steering wheel is successfully developed. ABC Supplier will retain IP rights related to the proprietary manufacturing process (trade secret) developed by ABC Supplier to mass produce the wheel at scale. Can ABC Supplier include the applicable R&D costs in its R&D tax credit?
  - Result: No. Even though ABC Supplier retains IP rights to the manufacturing process, ABC Supplier does not bear the economic risk and therefore can not include the associated costs in its R&D credit. OEM bears economic risk.
- Example 2B. Same as example 1A, except OEM agrees to pay “ABC Supplier” on a **fixed fee (or “per unit”) basis** after ABC Supplier successfully develops the steering wheel. Can ABC Supplier include the applicable R&D costs in its R&D tax credit?
  - Result: Yes. ABC Supplier retains IP rights to the manufacturing process AND bears the economic risk of success. Therefore ABC Supplier can include the associated costs in its R&D credit.
- Example 3. Korean parent company, “K-Parent” hires its 100%-owned U.S. subsidiary “U.S.-Sub” to develop a new EV battery. K-Parent agrees to pay U.S.-Sub all of its costs, plus a small profit margin (Cost-Plus 8%), regardless of whether the battery is successfully developed. Also, at the conclusion of the R&D effort, K-Parent will exclusively own the associated IP rights and trade secrets. Can U.S.-Sub include the applicable R&D costs in its R&D tax credit?
  - Result: YES! Even though U.S.-Sub does not bear the economic risk or own IP rights at the legal entity level….since the two entities are in the same R&D controlled group (greater than 50% common ownership), the U.S.-Sub IS eligible to include the applicable costs in its R&D Tax Credit.

Examples of Qualifying Activities by Industry

Materials & Manufacturing

- **Developing and testing new metal alloys** or composite material formulations to meet specific strength, weight, or durability requirements for customers.
- **Optimizing manufacturing processes** like heat treatment, welding, or forming to improve the quality of a product or increase production yield**.**
- **Experimenting with new coatings** or surface treatments to enhance a product's resistance to corrosion or wear.
- **Prototyping and creating custom tools** or equipment for a unique manufacturing process.



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Examples of Qualifying Activities by Industry

Materials & Manufacturing - Continued

- New Product Introduction
- Obsolescence or Supply Chain Issues
- Qualifying New Materials
- Product Improvement or Enhancements
- First Runs
- Creation of a New Manufacturing Process
- Continuous Improvement Initiatives
- Increasing Throughput
- Unsuccessful Efforts
- Identifying Quality Issues in Production
- Decreasing Scrap Through Trial Runs
- Touch Labor during Trial Runs
- Efforts to Produce Current Product Offering with Reduced Costs



Examples of Qualifying Activities by Industry



Automotive & EV Components

- **Designing and testing new parts** to improve a vehicle's performance, safety, or fuel efficiency. This could include new chassis designs, brake systems, or fluid-carrying components.
- **Developing new manufacturing processes** to reduce waste, increase production line efficiency, or improve the durability of parts.
- **Prototyping and testing new materials** for use in vehicle components to reduce weight or improve strength.
- **Engineering and integrating software** for in-vehicle systems, such as engine management, safety controls, or infotainment.

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Examples of Qualifying Activities by Industry

Software & IT Services

- **Developing new algorithms** for artificial intelligence, machine learning, or data analytics applications.
- **Designing and building new software architectures** or platforms that solve complex technical challenges.
- **Experimenting with new coding languages or techniques** to improve the performance, security, or scalability of a software product.
- **Creating and testing custom integrations** between different software systems that require significant technical experimentation.

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Examples of Qualifying Activities by Industry

Electronics & Energy Storage

- **Developing and testing new battery** chemistries to increase energy density, improve charging speed, or enhance safety.
- **Designing and prototyping new solar panel components** or systems for greater energy capture efficiency.
- **Engineering and developing software** to manage and optimize energy storage systems for a power grid or large-scale solar projects.
- **Experimenting with novel materials** for use in rechargeable batteries or solar components to reduce costs or improve performance.

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Examples of Qualifying Activities by Industry

Construction & Engineering

- **Designing and engineering specialized HVAC systems** to meet stringent air quality and particulate control requirements for cleanrooms in the biotech or semiconductor industries.
- **Developing custom solutions** for a facility's electrical, plumbing, or utility systems that deviate from standard methods due to a client's unique needs.
- **Experimenting with new construction techniques** or materials to improve the efficiency, safety, or environmental impact of a building.
- **Creating custom machinery** or automated systems for a manufacturing facility.

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Case Study – R&D Credit (Example 4)

- Background: Alpha Automotive Components, a U.S. subsidiary of a major Korean automotive parts manufacturer, operates a state-of-the-art facility in Georgia. As a Tier 1 supplier, Alpha incurs $2M per year in labor and material costs related to designing, developing, and prototyping advanced components for a new electric vehicle (EV) platform being launched by its parent company, "K-Motors," in the U.S. market.
- The Challenge: In the past, Alpha had not claimed the U.S. R&D tax credit. The management mistakenly believed that because they were a foreign-owned subsidiary, their R&D work would not qualify. As a result, Alpha's U.S. taxable income was higher than it needed to be, and the company was missing out on a significant tax benefit.
- The Solution:
  - Alpha Automotive Components hired Aprio to conduct an R&D Tax Credit Study for the 2025 tax year. As a result, Aprio calculated and documented the following Federal and Georgia R&D Credits:
    - 2025 Federal R&D Credit: $110,600
    - 2025 Georgia R&D Credit: $ 90,500
    - **Total 2025 R&D Credits: $201,100**
  - Additionally, Aprio R&D consultants identified a similar amount of credits that were available for each open tax year (2022, 2023, and 2024). At the conclusion of the 2025 R&D Study, they helped Alpha file amended returns to claim more than $600,000 of additional credits.

THANK YOU!



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