



Petitioner's representative responded and provided a copy of the study for the Idaho research credit.

The study shows that Petitioner claimed the Idaho research credit on multiple projects regarding design, development, conversion, and/or installation of modular building and its components for commercial and institutional purposes. Petitioner designed data and electrical systems and installed them into a modular building upon receipt of order from a customer who intended to use the modular building as a control center

The Bureau reviewed the report and determined that while Petitioner's expenditures were incurred with their trade or business, they did not conduct their projects in the experimental or laboratory sense (the process of experimentation test). Petitioner did not track time on each project to calculate the wages incurred for specific research activities. Regarding the contract expenses, there is no written contract because Petitioner relied on an oral agreement. The Bureau determined that Petitioner did not meet the requirements for the credit; therefore, the expenditures Petitioner claimed are not qualifying expenditures for the Idaho research credit.

The Bureau's reasoning that Petitioner did not satisfy the process of experimentation test is because Petitioner did not have a methodical plan to test, analyze, refine, and retest the hypothesis to constitute experimentation. Petitioner's documentation identified specific activities that were performed, the specific employees that performed them, and the estimates of time each employee spent performing those activities. Petitioner's documentations are not concurrent data collection and/or analysis of each specific activity, but rather re-creation of summary records for past events as it has no specific date of occurrence for each specific activity.

In the Notice, the Bureau indicated that they considered whether the shrink-back rule<sup>1</sup> was applicable to any of Petitioner's projects. Because of Petitioner's statement, "each module is a "prototype/first article", the Bureau determined that Petitioner treated the entire process as its research and development activities, instead of only a partial process. The Bureau did not receive details of how the costs are allocated to each unique project and the time spent on each item of the projects. The Bureau determined that Petitioner did not meet the burden of proof; therefore, the shrink-back rule is not applicable. With consideration of Petitioner's business history and experience, the Bureau assumed that many aspects of constructing a modular building are normal functions for Petitioner even if Petitioner conducted the projects only for partial process in manufacturing a whole modular building. The Bureau determined that Petitioner made each "prototype/first article", either a modular building as a whole or partial process, to meet a particular customer's requirement or need (adaptation of an existing business component).

The Bureau reviewed the information, determined that Petitioner's projects are not "qualified research", and issued the Notice denying the Idaho research credit claimed for all projects in all tax years.

In response to the Notice, the representative submitted a protest, disagreeing with the Bureau's determination. The Bureau acknowledged the protest and referred the matter to the Tax Commission's Appeals Unit (Appeal) for administrative review.

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<sup>1</sup> The IRS Audit Techniques Guide: Credit for Increasing Research Activities (i.e., Research Tax Credit) IRC § 41 – Qualified Research. 5. Qualified Research Activities.

b. Shrink Back

...If all aspects of such requirements are not met at that level, the test applies at the most significant subset of elements of the product, process, computer software, technique, formula, or invention to be held for sale, lease, or license. This "shrinking back" is to continue until either a subset of elements of the business component that satisfies the requirements is reached, or the most basic element of the business component is reached and such element fails to satisfy the test...The burden is on the taxpayer to establish that all of the section 41(d)(1) requirements have been met.

Appeals sent Petitioner and their representative a letter explaining the options available for redetermining a Notice. The representative responded and requested an informal hearing, which was held on May 18, 2023. Appeals requested additional information and received it from the representative on July 17, 2023, and September 5, 2023. Having reviewed the file, the Tax Commission hereby issues its final decision.

### **ISSUE**

The issue on appeal is whether Petitioner's activities have met the requirements for the Idaho research credit pursuant to Idaho Code section 63-3029G.

### **LAW AND ANALYSIS**

Idaho Code section 63-3029G allows a nonrefundable credit for increasing research activities in Idaho. For purposes of the Idaho research credit, "qualified research expenses," means the same as defined in Internal Revenue Code (I.R.C.) section 41, except that the research must be conducted in Idaho.

To be eligible for the credit, a taxpayer must show that it performed "qualified research" during the years at issue in accordance with I.R.C. section 41(d). Research activity is "qualified research" under I.R.C. section 41(d) only if it satisfies all the four (4) tests. *See Union Carbide Corp. & Subsidiaries v. Comm'r*, 97 T.C.M. (CCH) 1207 (T.C. 2009), 2009 WL 605161, at \*77, *aff'd*, 697 F.3d 104 (2d Cir. 2012).

First, the research expenses must be eligible for treatment as expenses under IRC section 174 (the section 174 test). I.R.C. § 41(d)(1)(A). Second, the research must be undertaken for the purpose of discovering information that is technological in nature (the technological information test). I.R.C. § 41(d)(1)(B)(i). Third, the application of the research must be intended to be useful in the development of a new or improved business component (the business component test).

I.R.C. § 41(d)(1)(B)(ii). Fourth, substantially all the activities constitute elements of a process of experimentation for a new or improved function, performance, or reliability or quality (the process of experimentation test). I.R.C. §§ 41(d)(1)(C) and 41(d)(3). If the research fails any of these tests, it is not qualified research for the purposes of the research credit.

These 4 tests must be applied separately to each “business component” of the taxpayer. A “business component” is any product, process, technique, formula, or invention which is to be used by the taxpayer in its trade or business.

Research activity is not “qualified research” if the purpose of the research relates to style, taste, cosmetic, or seasonal design factors. I.R.C. § 41(d)(3)(B). Further, the activities specifically excluded from “qualified research” are the research conducted after the beginning of commercial production of the business component, I.R.C. section 41(d)(4)(A), and the research related to the adaptation of an existing business component to a particular customer’s requirement or need. I.R.C. § 41(d)(4)(B). Although activities relating to adapting an existing business component to a particular customer’s requirement or need are not “qualified research”, this exclusion does not apply just because a business component is intended for a specific customer. Treasury Regulation (Treas. Reg.) § 1.41.-4(c)(3).

### **Section 174 Test**

I.R.C. section 174 provides that a taxpayer may treat research or experimental expenditures, paid or incurred, during the taxable year in connection with its trade or business, as expenses not chargeable to a capital account. I.R.C. § 174(a)(1). Treas. Reg. section 1.174-2(a)(1) defines research or experimental expenditures as expenditures that represent research and development costs in the experimental or laboratory sense, which means that the qualified expenditure must be for activities intended to eliminate uncertainty in the development or

improvement of a product. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the design of the product. The taxpayer must perform activities intended to discover information not otherwise available regarding the capability of improving the product or for improving the design or development of the product. *Id.* For an uncertainty to exist under I.R.C. section 174, a taxpayer must be uncertain about whether it can achieve its objective through research.

In the present case, Petitioner explained that they encountered a number of uncertainties to be resolved during each project. As examples, during the duration of the project numbers 18002, 18003, and 18004 described as “24 x 64 Control Facility

, the uncertainties included:

- the capability of a modular building for designing, templating, assembling, un-assembling, transporting and then reassembling onsite.
- the layout and installation of significant volume of high/low voltage wirings to fit all in the modular building re-assembled onsite.
- the capability of the required fire suppression system for designing, templating, assembling, un-assembling, transporting and then reassembling onsite.
- The layout and installation of fire sprinkler systems to fit and operate in the modular building re-assembled onsite.
- the process to meet the state government’s requirements.

### **Process of Experimentation**

To overcome uncertainties, a taxpayer should use a systemic inquiry as part of the process of experimentation; a requirement of qualified research under I.R.C. section 41(d)(1)(C). To be a true process of experimentation, the project must use the scientific method. This means “the project must involve a methodical plan involving a series of trials to test a hypothesis, analyze the data, refine the hypothesis, and retest the hypothesis so that it constitutes experimentation in the scientific sense.” *Union Carbide Corp. & Subs. v. Commissioner*, T.C. Memo. 2009-50 (2009).

Petitioner's documentation regarding the above-mentioned three projects states that the process of experimentation was "primarily fitment and testing", and "there were no templates or prototypes to be used since it was simply a fit and re-fit scenario." Petitioner argues, since there was no guideline for testing, other than the one available for a mobile home, the result of their testing is a new process. Petitioner treated the testing as part of the projects, not as an isolated process. Petitioner also described the process of experimentation for project numbers 18017-18020, and 18216-18217 as the "fit testing."

The Tax Commission reviewed details of each project and found that Petitioner's projects apply common solutions to common problems that all manufactures would encounter in a production process to meet a particular customer's requirements and needs. Petitioner's prototype/first article of each project is a result of multiple test-fittings for wirings, fire suppression systems, audio systems, roofs, HVAC systems, sewer lines, etc. The court stated regarding the fit testing that it struggled to see how it was investigative in nature. Citing *Mayrath v. CIR*, 41 T.C. 582, 590 (1964), aff'd, 357 F.2d 209 (5th Cir. 1966) that I.R.C. section 174 is intended to "limit deductions to those expenditures of an investigative nature." The court stated that for activities to be "investigative in nature," the taxpayer must closely examine the uncertainty at issue and systematically inquire about potential solutions to resolve it. Petitioner's fitment testing is not investigative in nature; therefore, Petitioner did not meet the process of experimentation. I.R.C. section 41(d)(1)(C).

## **Adaptation of Existing Business Component**

All the projects that Petitioner claimed as qualified research activities were initiated by their customers' orders. Any new process created by Petitioner is in direct response to their customers' specifications and requirements and to adapt existing business components; therefore, Petitioner's projects do not meet the definition of qualifying research credit. Treas. Reg. § 1.41-4(c)(3)<sup>2</sup>. However, Petitioner argues that, just because a business component is intended for a specific customer, their activities should not be excluded from the definition of qualifying research activity.

Even if a business component is intended for a specific customer, there are some situations where an activity may be considered qualified research. For example, when a taxpayer had to manufacture a product for a specific customer, and it had to be made of different material (i.e., a lighter material) than the materials the taxpayer regularly uses in their normal manufacturing process, and it was necessary for the taxpayer to do substantial research to see if such a product could be made to meet the customer's specifications, then the taxpayer's research may potentially be considered as more than the mere adaptation of an existing product to the customer's needs.

Another example is when a taxpayer, who is a manufacturer, undertakes a manufacturing process for a new product design and determines that it requires a specialized type of robotic equipment to use in the manufacturing process for its new products. Such robotic equipment is not commercially available, and the taxpayer, therefore, purchases the existing robotic equipment for the purpose of modifying it to meet its needs. The taxpayer's engineers identify uncertainty that is technological in nature concerning how to modify the existing robotic equipment and conduct

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<sup>2</sup> Treas. Reg. § 1.41-4(c) Excluded activities. (3) **Adaptation of existing business components.** Activities relating to adapting an existing business component to a particular customer's requirement or need are not qualified research. This exclusion does not apply merely because a business component is intended for a specific customer.



extensive scientific and laboratory testing of design alternatives. As a result of this process, the taxpayer's engineers develop a design for the robotic equipment that meets their needs. The taxpayer's research activities to determine how to modify their robotic equipment for its manufacturing process is more than the mere adaptation of an existing product to the customers' needs.

Petitioner in this case conducted multiple projects and stated "most all the construction of any modular building must be researched, designed, templated, assembled, un-assembled and then re-assembled on site. This is due to the modularity of the building; it needs to be able to be transported to the site within the permits of the highway system and be cost effective to the end user." There's no proof that Petitioner used different materials than the material regularly used or modified its robotic equipment for its manufacturing process. Petitioner's documents rather indicate that Petitioner's projects are completed in the regular course of their manufacturing process and/or are to adopt an existing business component to a particular customer's requirement or need. Therefore, their projects are not "qualified research".

### **Qualified Research Activity and its Expenses**

In addition to determining whether Petitioner's projects are qualified research activities (QRAs), the Tax Commission looked at the qualified research expenses (QREs).

For the wages, Petitioner identified employees by job title and function and estimated the percentage of the employee's time devoted to research. For the supplies, Petitioner claimed the purchases from the 3<sup>rd</sup> party contractors. For the contract expenses, Petitioner claimed the fees paid for the services provided by the 3<sup>rd</sup> party contractors. Petitioner provided some documentation for the supplies and the contract expenses, which consisted of bills and invoices from the contractors with verification of payment. Of the invoices provided, some were for floor plans,

some were design plans for electrical power, some were design plans for HVAC and ceiling plans, some for submission for permits, and some for upgrading ventilation. These bills and invoices list the purchases all together and do not isolate the supply purchase from the service purchase. The contract expenses are subject to a sixty-five percent (65%) limitation if the contract expenses incurred for qualified research conducted in Idaho. Each purchase covers multiple projects and is not allocated to a specific project. All purchases were purchases that Petitioner would use in the ordinary course of their trade or business.

In addressing QREs that a taxpayer would have normally incurred in their business, the trial court stated in *Union Carbide Corp. & Subs. v. Commissioner*, supra.,

Section 41(d)(2)(C) provides that when a taxpayer seeks a research credit related to its production process, the production process must be divided into two business components, one that relates to the process and another that relates to the product. This indicates that Congress intended to allow taxpayers research credits for research performed to improve their production processes, but Congress did not intend for all of the activities that were associated with the production process to be eligible for the research credit if the taxpayer was performing research only with respect to the process, not the product. See sec. 1.41-4(b)(1), Income Tax Regs. Here, the disputed supplies were raw materials used in the commercial production and sale of finished products. They were used to make products for sale, not for experimentation

. . . . Taxpayers may not circumvent the narrow definition of qualified research that Congress intended by including as QREs costs of a project that are not incurred primarily as a result of the qualified research activities. Raw materials used to make finished goods that would have been purchased regardless of whether a taxpayer was engaged in qualified research are not “used in the conduct of qualified research”. See sec. 41(b)(2)(A)(ii).

Similarly, the costs of wages constitute QREs only if they are paid for services consisting of engaging in or supervising qualified research. Sec. 41(b)(2)(B). Services performed by employees for activities that would occur regardless of whether the taxpayer was engaged in qualified research are not qualified services. See sec. 41(b)(2)(A)(i).

When section 41(d)(2)(C) applies and the relevant business component is the process, and production of the product alone would not constitute qualified research, we find that the costs of supplies that would be purchased and wages

attributable to services that would have been provided regardless of whether research was being conducted are costs associated with the product business component and are not incurred in the conduct of qualified research.

Similarly, Petitioner in this case is claiming wages, supplies, and contract labor as QREs that would have been incurred regardless of any qualified research. Petitioner's purchases were attributable to ordinary business expenses (IRC section 162 business expenses) that they later reclassified as research and experimental expenditures (IRC section 174 expenses) when they amended their tax returns. The qualified research expenses include only those expenses directly related to the research activity. Petitioner's documentations do not identify the specific materials used or the cost of that material. Treas. Reg. § 1.41-4(d).

Appeals requested the representative clarify whether Petitioner used a time tracking system (i.e., timecard, time-allocation codes in timesheet, etc.) for each employee who worked on each project and explain how the number of hours per employee per project was calculated if no time tracking system was used. The representative responded stating that Petitioner did not use a time tracking system for each employee who worked on each project and explained:

“The qualified hours were calculated utilizing extensive transcribed surveys and/or interviews of qualified employees and in some cases, management if qualified employees were no longer employed and data of total hours worked was also utilized. Hours per project per employee were calculated by an estimate prepared by management utilizing project records and respective knowledge.”

To justify Petitioner's use of estimation on the number of hours per employee per project, the representative relied on the Cohan Rule<sup>3</sup>. *Cohan v. Commissioner*, 39 F.2d 540 (2d Cir. 1930). The Cohan Rule may allow a taxpayer to estimate expenses, but the Tax Commission is under no obligation to estimate or accept a taxpayer's estimate under the Cohan Rule. The Cohan Rule only

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<sup>3</sup> *Cohan v. Commissioner*, 39 F.2d 540 (2d Cir. 1930), often referred as the “Cohan Rule”.

applies to help a court determine the *amount* of the taxpayer's allowable deduction, not the *existence* of the underlying expense. While the Cohan Rule allows the use of estimates of expenses if a taxpayer provides reasonable basis for the estimates, estimation is not allowed to determine QRAs. There must be a connection between the use of the QREs and the QRAs. The Tax Commission finds that Petitioner's estimation of the number of hours per employee per project is estimation of QRAs. The Tax Commission also finds that Petitioner did not establish the connection between the QREs and the QRAs. Therefore, Petitioner did not have any QREs that they can claim in the calculation of the Idaho research credit.

### **Record Keeping Requirements**

The Tax Commission requested the representative provide journal entries of the project numbers 18216-18217, 19213, and 20007-20009 to verify details of QREs recognized in Petitioner's accounting system. The representative did not provide the requested journal entries "because, during these periods, the bookkeeping/accounting was recorded in various software programs for different functions of the business." Each taxpayer must retain and make available, on request, records for each item included in the computation of the credit for Idaho research activities claimed on an Idaho income tax return<sup>4</sup>. Treas. Reg. § 1.41-4(d)<sup>5</sup>. The Tax Commission finds that Petitioner's records are not sufficiently detailed to substantiate its entitlement to the Idaho research credit.

### **CONCLUSION**

Petitioner claimed the Idaho research credit for tax years 2018, 2019, and 2020. Upon review of the credit the Tax Commission found none of Petitioner's projects qualified as a research

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<sup>4</sup> Idaho Income Tax Administrative Rule 723

<sup>5</sup> TR § 1.41-4(d) **Recordkeeping for the research credit.** A taxpayer claiming a credit under section 41 must retain records in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit.

project because Petitioner did not satisfy all the required tests on any of the projects and the recordkeeping requirements for the credit. The Tax Commission upholds the audit adjustment disallowing the Idaho research credit.

THEREFORE, the Notice of Deficiency Determination dated December 6, 2022, and directed to \_\_\_\_\_ is AFFIRMED. Since Petitioner is a flow-through entity, the additional tax owed flowed through to its shareholders. Therefore, no demand or order for payment is necessary. An explanation of Petitioner’s right to appeal this decision is enclosed.

DATED this \_\_\_\_\_ day of \_\_\_\_\_ 2023.

IDAHO STATE TAX COMMISSION

**CERTIFICATE OF SERVICE**

I hereby certify that on this \_\_\_\_\_ day of \_\_\_\_\_ 2023,  
a copy of the within and foregoing DECISION was served by sending the same by United States  
mail, postage prepaid, in an envelope addressed to:

Receipt No.

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