BEFORE THE TAX COMMISSION OF THE STATE OF IDAHO

In the Matter of the Protest of [redacted]	)	
	)	DOCKET NO. 0-689-955-840
	)	
	)	
Petitioner.	)	DECISION
	)	

[redacted] (Petitioner), dba [redacted] ([redacted] protested the Notice of Deficiency Determination (Notice) for tax years 2019, 2020, 2021, and 2022 (audit period), dated August 14, 2024. Petitioner disagreed with the disallowance of the credit claimed for Idaho research activities (Idaho research credit). The Tax Commission reviewed the matter and hereby issues its final decision to uphold the Notice.

Background

Petitioner is a limited liability company filing returns as a partnership. Petitioner's Idaho filing history for the audit period is as follows:

- August 4, 2020: Filed original[1] Idaho Partnership Return of Income for tax year 2019
- September 15, 2023: Filed original Idaho Partnership Return of Income for tax year 2022 (containing no financial information) and amended Idaho Partnership Return of Income for tax year 2019
- December 26, 2023: Filed amended Idaho Partnership Return of Income for tax year 2022 and original (though marked as amended) Idaho Partnership Return of Income for tax years 2020 and 2021

The Idaho returns filed December 26, 2023, all included claims for the Idaho research credit ($16,721; $15,125; $16,356 respectively). None of the other Idaho returns filed for the tax years covered by the audit period claimed the credit. The amended 2019 return reflected a change (from

[1] The term "original" in this context means the first return received by the Idaho State Tax Commission for the tax period in question.

the original return) in ownership percentage between the two owners and changed the return type from a composite return to a regular return.

On February 9, 2024, the Tax Commission's Income Tax Audit Bureau (Audit) sent Petitioner a letter with questions requesting information and documentation to support the Idaho research credits claimed for tax years 2020, 2021, and 2022. In early March 2024, Audit received approximately 360 pages in response, consisting of the following:

- A Form ID-POA, *Power of Attorney*, naming multiple individuals at alliantgroup as attorneys-in-fact (AIF)[2]
- Written responses from AIF to the questions in Audit's letter
- A copy of an engagement letter contracting AIF to prepare a research credit study for [redacted]
- Federal and Idaho partnership returns for tax years 2020 and 2021 (not marked as amended and with no claim of federal or Idaho research credit)
- A copy of AIF's final research credit study for tax years 2019 through 2022
- Two spreadsheets showing "qualifying" expenses (combined supplies and wages) by project and "qualifying" wages by employee for tax years 2020, 2021, and 2022

On March 28, 2024, Audit sent a follow-up letter requesting additional information and documentation. On April 24, 2024, Audit received approximately 425 additional pages of documentation, consisting largely of technical drawings from 20 of [redacted] myriad of projects. Audit also received a spreadsheet reporting the cost of supplies for 167 projects, along with a collection of "job profitability reports" on a client by client basis showing these same costs, but no revenue figures.

After reviewing the information provided by Petitioner's AIF, Audit issued the Notice on August 14, 2024. In the Notice, Audit disallowed Petitioner's amended 2019 Idaho return, stating that it was filed more than three years past the original due date of the return. Audit also disallowed

[2] The term "AIF" in this decision will refer to alliantgroup as a whole and any individual at alliantgroup specifically named on Form ID-POA.

the Idaho research credit claimed for tax years 2020, 2021, and 2022. Audit's Notice gave Petitioner until October 16, 2024, to file a written protest.

On October 16, 2024, AIF mailed a letter of protest for the audit period, specifically addressing Petitioner's claim of Idaho research credit. AIF stated that Petitioner had claimed credits for increasing research activities for the following amounts: $6,090 for 2019; $16,721 for 2020; $15,125 for 2021; and $16,355 for 2022. AIF wrote, "[Petitioner] takes exception to the Notice of Deficiency Determination fully disallowing all R&D tax credits claimed for Tax Years 2019-2022… In this case, the exam team misinterpreted and misapplied the law and regulations applicable to the Idaho Research Credit by proposing the above-described adjustments."

On November 6, 2024, Audit sent Petitioner and AIF letters acknowledging receipt of the protest and informing them that the matter was being referred to the Tax Commission's Tax Appeals unit (Appeals) to continue the redetermination process. On December 27, 2024, Appeals sent AIF and Petitioner letters outlining the options available for redetermining a protested Notice. After exchanging phone calls and emails with AIF, Appeals scheduled an informal hearing at a time accommodating all participants' schedules. The hearing was held via videoconference on April 9, 2025. Present in the Tax Commission's Boise office were one of the Commissioners, the Tax Appeals Specialist assigned to the case, the Tax Appeals Manager, and a Deputy Attorney General. Attending remotely were the business owner, two employees of alliantgroup, and a CPA.

During the informal hearing, Petitioner and AIF explained Petitioner's process for developing plans and constructing the custom [redacted] which make up the bulk of their business and all of their qualifying research, as well as how their products meet the four-part test to be qualifying research. At the end of the hearing, Appeals requested copies of notes from AIF's interviews with Petitioner's employees and an organizational chart. Those items were

provided on April 15, 2025. On June 17, 2025, Appeals sent AIF an email requesting additional information. AIF replied via email on July 1, 2025.

Based on an analysis of applicable law and available information, the Tax Commission makes its final determination as follows.

Law & Analysis

AIF's protest letter addresses a single issue (research and development credits) but encompasses four years, stating that Audit disallowed all research credits claimed for the audit period. Additionally, one of the documents AIF provided to Audit during the examination was the final report from their Research & Development Tax Credit Study. Like the later protest letter, the study also shows that Petitioner qualified for Idaho research credit for tax year 2019. However, neither the original 2019 Idaho return filed in August 2020 nor the amended 2019 Idaho return filed in September 2024 claimed any Idaho research credit. Audit's adjustment for 2019 was not protested. Therefore, the Tax Commission determined that the adjustment stands.

Regarding the protested issue, 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 (IRC) 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 IRC section 41(d). Research activity is "qualified research" under IRC section 41(d) only if it satisfies four separate tests.[3]

[3] 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).[4] Second, the research must be undertaken for the purpose of discovering information that is technological in nature (the discovering technological information test).[5] 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).[6] Fourth, substantially all the activities must constitute elements of a process of experimentation for a new or improved function, performance, reliability or quality (the process of experimentation test).[7] Each of these tests is discussed in more detail below. If the research fails any of these tests, it is not "qualified research" for the purposes of the research credit.

A research activity is specifically excluded from "qualified research" if the purpose of the research relates to style, taste, cosmetic, or seasonal design factors,[8] if the research is conducted after the beginning of commercial production of the business component,[9] or if the research is related to the adaptation of an existing business component to a particular customer's requirement or need.[10]

Section 174 Test

IRC section 174[11] 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

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[4] IRC section 41(d)(1)(A).
[5] IRC section 41(d)(1)(B)(i).
[6] IRC section 41(d)(1)(B)(ii).
[7] IRC sections 41(d)(1)(C) and 41(d)(3).
[8] IRC section 41(d)(3)(B).
[9] IRC section 41(d)(4)(A).
[10] IRC section 41(d)(4)(B).
[11] IRC section 174: Prior to 2022, taxpayers could immediately expense Research and Development (R&D) expenditures under IRC section 174. For the tax years beginning on and after January 1, 2022, the Tax Cuts and Jobs Act (passed in 2017, signed into law and came into effect in 2022) requires R&D expenditures to be amortized over five years for domestic R&D expenditures.

chargeable to a capital account.[12] Treasury Regulation section 1.174-2(a)(1) defines the term "research or experimental expenditures" as used in IRC section 174. It generally includes all such costs incident to the development or improvement of a product that "represent research and development costs in the experimental or laboratory sense." The qualified expenditure must be for activities intended to eliminate uncertainty in the development or improvement of a product. Treasury Regulation section 1.174-2(a)(1) states in part, "Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the appropriate design of the product." However, "because the taxpayer need only be uncertain as to 'the capability *or* method o*r* the appropriate design' of the improvement, an uncertainty may exist even if the taxpayer knows that it is technically possible to achieve a goal but is uncertain of the method or appropriate design to use to reach that goal."[13] Treasury Regulation section 1.174-2(a)(1) also states, "Whether expenditures qualify as research or experimental expenditures depends on the nature of the activity to which the expenditures relate, not the nature of the product or improvement being developed or the level of technological advancement the product or improvement represents." Additionally, "[D]eductions under [IRC] section 174 are limited to 'expenditures of an investigative nature expended in developing the *concept* of a model or product,' as opposed to the construction or manufacture of the product itself."[14]

Discovering Technological Information Test

To satisfy the technological in nature requirement for qualified research, the process of experimentation used to discover information must fundamentally rely on principles of the physical or biological sciences, engineering, or computer science. A taxpayer may employ existing

[12] IRC section 174(a)(1).
[13] *Union Carbide Corp. & Subs. v. Commissioner*, TC Memo 2009-50 (2009).
[14] Ibid.

technologies and may rely on existing principles of the physical or biological sciences, engineering, or computer science to satisfy this requirement. The information sought does not have to be groundbreaking or expand the volume of knowledge available in the field of scientific study.

Business Component Test

A taxpayer must intend to apply the information being discovered to develop a new or improved business component of the taxpayer. A business component is any product, process, computer software, technique, formula, or invention, which is to be held for sale, lease, license, or used in a trade or business of the taxpayer. Each business component of the taxpayer must satisfy all 4 tests.[15] Treasury Regulation section 1.174-2(a)(5) explains that, even if a business component as a whole fails any of the four tests, a taxpayer may still satisfy the tests "at the level of the component or subcomponent of the product." This is commonly known as the shrinking-back rule. This rule is repeatedly applied to smaller and smaller elements of the business component either until an element of the business component is found that qualifies or all elements are deemed not to qualify.

Process of Experimentation Test

To overcome uncertainties, a taxpayer should use a systematic inquiry as part of the process of experimentation. 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."[16]

Treasury Regulation section 1.41-4(a)(6) states in part,

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[15] IRC section 41(d)(2)
[16] *Union Carbide Corp. & Subs. v. Commissioner*, T.C. Memo 2009-50 (2009).

> In order for activities to constitute qualified research under section 41(d)(1), substantially all of the activities must constitute elements of a process of experimentation that relates to a qualified purpose. The substantially all requirement … is satisfied only if 80 percent or more of a taxpayer's research activities, measured on a cost or other consistently applied reasonable basis (and without regard to section 1.41-2(d)(2)), constitute elements of a process of experimentation for a purpose described in section 41(d)(3).

Recall that IRC section 41(d)(3) defines qualified research as that relating to a new or improved function, performance, reliability, or quality and specifically excludes research related to style, taste, cosmetic, or seasonal design factors.

Treasury Regulation section 1.41-4(a)(6) also requires that the "substantially all" test – a subtest to the process of experimentation test – be applied to *activities*, not *physical elements of the business component being developed or improved* since the extent of experimentation would not vary in proportion to the size of each element. For example, determining the design of smaller and more complex elements might require more experimentation than determining the design of larger but simpler elements. Additionally, this test applies separately to each new or improved business component being considered for the research credit.

The "substantially all" test is both a qualitative and quantitative test. Not only must the activities be of the proper type, but 80 percent of those activities must constitute a process of experimentation for an allowable purpose. In *Little Sandy (2023)*,[17] the 7th Circuit Court of Appeals determined that the correct fraction for determining whether the 80 percent mark is achieved in the process of experimentation test is "research activities that constitute elements of a process of experimentation divided by research activities not excluded under [IRC] section 41(d)(4) and whose expenses are deductible under Section 174." Treasury Regulation section 1.41-4(a)(6) states

[17] *Little Sandy Coal Co. Inc. v. Commissioner*, 131 AFTR 2d 2023-955 (62 F.4th 287)

that the activities must be "measured on a cost or other consistently applied reasonable basis (and without regard to section 1.41-2(d)(2))."

Application to [redacted]

In the Notice, Audit presented an analysis of the four-part test in reference to Petitioner and determined that Petitioner failed all four tests. According to Audit's analysis:

- Petitioner faced nearly the same uncertainty for every project: it was unknown whether the appropriate design could be constructed to the customer's specifications.
- Petitioner adapted existing business components to meet the needs of particular customers.
- Petitioner did not incur costs in the experimental or laboratory sense, because no such research was conducted.
- Petitioner did not meet the technological information test because the same methods used for building containers in prior years continued to be utilized during the years in question. Using computer-aided modeling and simulations does not mean qualified research was conducted.
- Petitioner has been designing and building custom [redacted] for over 20 years. Many aspects of the process involved are normal functions for the company.
- Petitioner has not shown how each project was entirely a new or improved business component.
- The documentation Petitioner provided does not show how the business formulated and tested hypotheses, engaged in systematic trial and error, or evaluated alternatives. Petitioner has not shown that a process of experimentation was undertaken.
- Simply narrating the steps of the process does not establish that Petitioner engaged in testing a hypothesis so that it constitutes experimentation in the scientific sense.
- Demonstrating that uncertainty was resolved is not in itself an indication that Petitioner engaged in a process of experimentation.

Audit concluded that Petitioner did not qualify for the research credit for these reasons:

- The goal of the research credit is to encourage companies to engage in research that they might not otherwise conduct due to high risks. The actions Petitioner undertook are normal practices in the business and not high-risk research.
- Petitioner did not pass any of the four-part test.
- Petitioner's individualized designs showed indications of style, taste, and cosmetic factors specifically excluded from qualifying research.

- Petitioner's documentation did not show that the company was conducting research in the experimental or laboratory sense.
- Petitioner did not provide documentation of a hypothesis being conceived and systematically tested nor of an evaluation of alternatives.

There are some aspects of Audit's conclusions that the Tax Commission agrees with and some with which it does not. For example, while making drawings and loading them into software are not necessarily research activities by themselves, they could be elements of a research process created to eliminate uncertainty in a product design if they coincide with other activities.

Designing and engineering [redacted] to customer specifications does not automatically qualify as research simply because of the novelty or newness of the products and the fact that the design of the product is unknown at the start. The activities in the designing and engineering process must qualify and pass all four tests. The resolution of uncertainty does not necessarily require experimentation, but passing the four-part test does.

The Tax Commission agrees that adapting an existing building component is not qualifying research. Petitioner's "adapting an existing building component" is likely limited but not completely absent. For example, if Petitioner had a series of containers that will be subject to the same requirements, there is potential that research is taking place to develop the first of these designs. Subsequent designs with minor "tweaks" would be adaptations of the first one.

The Tax Commission agrees with Audit's conclusion that using software does not automatically qualify as seeking technological information. However, using software in conjunction with some other hard science like engineering could be a qualifying activity.

Estimates are allowed in calculating the research tax credit, but only after it has been established that the taxpayer qualifies for the credit. According to the 7th Circuit Court of Appeals in *Little Sandy (2023)*:

> If a taxpayer can establish that qualified research occurred, we may estimate the qualified research expenses subject to the tax credit. See McFerrin, 570 F.3d at 679 (citing *Cohan v. Comm'r*, 39 F.2d 540, 544 [8 AFTR 10552] (2d Cir. 1930)). But this estimate relates to Section 41(b), which is a separate—albeit related—inquiry from Section 41(d). Only after a taxpayer establishes that qualified research has occurred under Section 41(d) may we estimate, if needed, the amount of qualified research expenses under Section 41(b). *Shami v. Comm'r*, 741 F.3d 560, 568 [113 AFTR 2d 2014-671] (5th Cir. 2014) ("[T]he Cohan rule is not implicated unless the taxpayer proves that he is entitled to some amount of tax benefit.").

It is to this last point the discussion must turn in this case. The overarching question is whether Petitioner is eligible to claim the research tax credit.

Recall that the four-part test (section 174 test,[18] technological information test, business component test, and process of experimentation test) must be applied to and passed by each business component for which a taxpayer wishes to claim the research credit. During the R&D tax credit study, AIF used statistical sampling to determine the qualifying research expenditures used in calculating the credits claimed. AIF explained that this was necessary due to the large number of projects Petitioner undertook during the years under review. The original list consisted of 193 projects, which was reduced to 167 after removing projects deemed to be non-qualifying by AIF's standards. AIF then conducted the sampling, selecting 21 projects to thoroughly analyze. In the report, AIF stated that Petitioner's employees did not accurately track time to projects.

When asked on June 17, 2025, to provide documentation of the activities involved in Petitioner's development of qualifying projects and proof that substantially all of those activities were part of a process of experimentation, AIF provided two spreadsheets on July 1, 2025. One contained "total first article material cost" and "total supply QREs" for the 21 projects selected for analysis in the statistical sampling process. The other contained information that had already been

[18] AIF entitles this test the "Elimination of Uncertainty" test in the report for R&D Tax Credit Study.

provided on April 24, 2024, in two different forms; this again showed supply costs only. AIF wrote a reminder in the reply email that the "substantially-all" requirement is satisfied if at least 80 percent of a taxpayer's research activities, measured on a cost (or other consistently applied reasonable) basis are elements of a process of experimentation for a qualifying purpose.

Remember that the correct fraction for determining whether the 80 percent mark is achieved in the process of experimentation test is "research activities that constitute elements of a process of experimentation divided by research activities not excluded under [IRC] section 41(d)(4) and whose expenses are deductible under Section 174." In *Little Sandy (2023)*, the 7th Circuit Court of Appeals agreed with the Tax Court's 2021 decision that "supplies are not activities" and therefore the cost of supplies are not taken into account when computing the fraction described in Treasury Regulation 1.41-4(a)(6), which is the same fraction from IRC section 41(d)(1)(c). Because this fraction excludes supply costs for research, and Petitioner and AIF have not provided any other cost or reasonable basis for calculating the percentage of activities that constitute elements of a process of experimentation, the Tax Commission determined that Petitioner does not meet the process of experimentation test. Failing any one of the four tests results in not being entitled to any research tax credit.

The 7th Circuit Court of Appeals also wrote in *Little Sandy (2023)*, "… shortcut estimates of experimentation-related activities will not suffice. Something more, such as documentation of time spent on such activities, is necessary," and "The lesson for taxpayers seeking to avail themselves of the research tax credit is to adequately document that substantially all of such activities were research activities that constitute elements of a process of experimentation. Generalized descriptions of uncertainty, assertions of novelty, and arbitrary estimates of time performing experimentation are not enough."

The Bureau added interest and penalty to Petitioner's tax deficiency. The Tax Commission reviewed those additions and finds them to be appropriate and in accordance with Idaho Code sections 63-3045 and 63-3046, respectively.

For tax years 2020, 2021, and 2022, Petitioner filed composite returns, thereby electing to pay any income tax due attributable to and on behalf of its nonresident owner. Therefore, Petitioner will be assessed the portion of additional tax, penalty, and interest attributable to the nonresident partner. The portion of additional tax, penalty, and interest attributable to the resident partner will flow through the business entity and be assessed separately to the individual.

Conclusion

The Tax Commission has determined that Petitioner has not provided sufficient documentation to meet the four-part test and is not eligible to claim the Idaho research credit.

THEREFORE, the Notice dated August 14, 2024, is hereby UPHELD and MADE FINAL.

IT IS ORDERED that Petitioner pay the following tax, penalty, and interest:

YEAR	TAX	PENALTY	INTEREST	TOTAL
2019	$3,161	$0	$457	$3,618
2020	8,360	1,126	968	10,454
2021	7,563	53	701	8,317
2022	$8,178	637	465	9,280
			Held refund	(3,963)
				$27,706

The Tax Commission DEMANDS immediate payment of this amount. Interest is calculated in accordance with Idaho Code section 63-3045.

An explanation of Petitioner's right to appeal this decision is enclosed.

DATED this _____ day of _____ 2025.

IDAHO STATE TAX COMMISSION

CERTIFICATE OF SERVICE

I hereby certify that on this _____ day of _____ 2025, 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.

[redacted]

_____

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[redacted]