# United States Tax Court

T.C. Memo. 2023-57

# JEFFREY A. HARPER AND KATHERINE M. HARPER, Petitioners

v.

COMMISSIONER OF INTERNAL REVENUE, Respondent

Docket No. 26176-16.

Filed May 10, 2023.

John H. Dies, Jeremy M. Fingeret, Jefferson H. Read, and Matthew S. Reddington, for petitioners.

Erika B. Cormier, Brian M. Howell, and Christopher J. Richmond, for respondent.

# MEMORANDUM OPINION

COPELAND, *Judge*: Section 41<sup>1</sup> provides a tax credit for certain "qualified research expenses" of taxpayers carrying on a trade or business. Petitioners, Jeffrey Harper and Katherine Harper, claimed section 41 credits of \$46,656 and \$778,610 for tax years 2012 and 2013 (years in issue), respectively, in connection with the activities of their S corporation, Harper Construction Co. (HCC), owned through a grantor trust of which Mr. Harper is the sole grantor and trustee. He is also the president of HCC. The Commissioner of the Internal Revenue Service (Respondent) disallowed these credits and issued a notice of deficiency to the Harpers on September 9, 2016, determining deficiencies in federal

<sup>&</sup>lt;sup>1</sup> Unless otherwise indicated, all statutory references are to the Internal Revenue Code, Title 26 U.S.C. (I.R.C. or Code), in effect at all relevant times, all regulation references are to the Code of Federal Regulations, Title 26 (Treas. Reg.), in effect at all relevant times, and all Rule references are to the Tax Court Rules of Practice and Procedure. Some dollar amounts are rounded.

**[\*2]** income tax of \$433,707 and \$2,249,217 and section 6662(a) accuracy-related penalties of \$86,741 and \$449,843 for 2012 and 2013, respectively. The deficiencies were additionally based on disallowing a net operating loss carryback from 2014 and making certain ancillary adjustments. The Harpers filed their Petition with this Court on December 7, 2016, assigning error to all parts of Respondent's notice of deficiency. When they filed their Petition, the Harpers were residents of California, and HCC was a corporation organized and operating under the laws of California.

This matter is before the Court on Respondent's Motion for Partial Summary Judgment and the Harpers' Memorandum in Respondent's Motion for Opposition to Summary Judgment. Respondent has alleged that the construction designs that underlie the Harpers' claims for section 41 credits for increasing research activities fail to meet the definition of "business components" that constitutes one of four threshold tests for qualified research. See I.R.C. § 41(d)(1), (2)(B). Respondent concludes that this failure alone means that Petitioners do not qualify for their claimed credits under section 41 for the years in issue.

#### Background

The following background statement is drawn from the pleadings, the parties' Motion papers, and the Declarations and Exhibits attached thereto. We state the background solely for purposes of ruling on the pending Motion for Partial Summary Judgment and not as findings of fact.

HCC was founded in 1974 and is based in San Diego, California. It is a privately owned design builder and general contractor that has worked on residential, commercial, and industrial projects around the country and overseas. Over the last 15 years, HCC has specialized in military design-build projects, including over 30 military housing projects.

HCC reported 53 separate projects during the years in issue as eligible for the research credit under section 41, including but not limited to work on the construction of aircraft hangars, maintenance facilities, military recruit barracks and living quarters, college buildings, medical clinics, instructional facilities, fitness centers, parking garages, training facilities, a 200,000-gallon solar-powered water tank, a photovoltaic renewable energy generation system, a multi**[\*3]** megawatt renewable energy system for use in South Africa, and a specialized energy solution in Las Vegas, Nevada. Respondent and the Harpers agree that each of HCC's projects is unique to a particular location, client need, and set of specifications, as well as being subject to regulatory and environmental constraints.

During the preconstruction, construction, design/development, and postconstruction phases of each project, HCC engaged in some or all of the following activities and services:

- Schematic Estimates
- System Cost Studies
- Scheduling
- Constructability Reviews
- Design Management
- Green Building Reviews
- · Zoning and Regulatory Investigation
- Preliminary Milestone Construction Schedule
- Project Management
- Final Bidding & Buyout
- Contract Procurement
- Jobsite Controls and Quality Assurance
- Safety Management
- LEED [Leadership in Energy and Environmental Design] Project Analysis & Registration/Certification
- Design and Development Estimates
- System Cost Studies
- Maintainability Reviews
- System Studies
- Value Engineering
- Sustainable Building Design & Construction
- Design Meetings
- As-Built Documentation
- Warranty Programming
- USGBC [U.S. Green Building Council] LEED Certification Management

HCC's work for each of its clients proceeded in five stages: job bid, conceptual design, design development, documentation, and construction. During the job bid phase, HCC would create a bid to present to the prospective client. Upon winning a bid, HCC began conceptual design, which involved identifying alternatives relating to building materials, building orientation, piping and duct routing, **[\*4]** insulation materials, and equipment sizes. In the course of this work, HCC prepared drawings and diagrams of potential layouts for the project.

Moving to the design development phase, HCC prepared detailed floor plans, along with an outline of major building materials, building systems, building code analysis, and methods of implementing the design. HCC would provide the client with several "submittals" at various stages of the design development phase. Once the design reached 90% completion, HCC prepared plans sufficient for permitting and construction. These plans contained both graphic and written specifications. HCC proceeded with actual construction once the building plans garnered client and regulatory approval.

In 2012 the Harpers hired alliantgroup, LP (alliantgroup), to opine on HCC's eligibility for qualified credits for increasing research activities in earlier tax years. Subsequently, alliantgroup prepared a research credit study for each of the years in issue; however, those studies were not finalized until after the relevant tax returns had been filed. For the 2012 tax year the research credit study shows that the "Total Federal Qualifying Wages" were \$4,621,679 and the "Total Federal QREs [Qualifying Research Expenses]" were also \$4,621,679. Therefore, the total "Gross Federal R&D Tax Credits" were \$462,168.<sup>2</sup> Similarly, for the 2013 tax year the research credit study shows "Total Federal Qualifying Wages" of \$3,874,821 and "Total Federal QREs" of \$3,874,821. Therefore, the total "Gross Federal R&D Tax Credits" were \$387,482. Further, the alliantgroup research studies described HCC's relevant research activities as follows: "Each project was undertaken to develop unique solutions to a combination of various aspects spanning the disciplines of architectural, civil, structural, mechanical, electrical, and plumbing engineering, among others," and HCC "faced many uncertainties regarding the final design resulting from the unique combinations of all project requirements."

#### Discussion

# I. Summary Judgment

The purpose of summary judgment is to expedite litigation and avoid costly, time-consuming, and unnecessary trials. *Fla. Peach Corp.* 

<sup>&</sup>lt;sup>2</sup> This figure equals 20% of the excess of HCC's QREs (as calculated by alliantgroup) over HCC's "base amount," a certain percentage of its average annual gross receipts for the preceding four tax years. See I.R.C. § 41(a)(1), (c).

**[\*5]** v. Commissioner, 90 T.C. 678, 681 (1988). Under Rule 121(a)(2), we may grant summary judgment when there is no genuine dispute as to any material facts and a decision may be rendered as a matter of law. Sundstrand Corp. v. Commissioner, 98 T.C. 518, 520 (1992), aff'd, 17 F.3d 965 (7th Cir. 1994). A partial summary adjudication is appropriate if some but not all issues in the case may be decided as a matter of law, even though not all the issues in the case are disposed of. See Rule 121(a)(1) and (2); Turner Broad. Sys., Inc. & Subs. v. Commissioner, 111 T.C. 315, 323–24 (1998).

The burden is on the moving party to demonstrate that no genuine dispute as to any material fact remains and that it is entitled to judgment as a matter of law. *FPL Grp., Inc. & Subs. v. Commissioner*, 116 T.C. 73, 74–75 (2001). In deciding whether to grant summary judgment, we construe factual materials and inferences drawn from them in the light most favorable to the nonmoving party. *Sundstrand*, 98 T.C. at 520 (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986)). However, the nonmoving party may not rest upon the mere allegations or denials in its pleadings but instead must set forth specific facts showing that there is a genuine dispute for trial. Rule 121(d); *Sundstrand*, 98 T.C. at 520.

Having reviewed Respondent's Motion and the Harpers' Opposition, along with all the documents submitted in support of these filings, we will deny the Motion.

#### II. Section 41 Credit for Increasing Research Activities

When Congress added the section 41 qualified research expenses credit to the Code in 1981, it aimed to spur business investments in technological research, finding that the motivation of section 174 was insufficient. H.R. Rep. No. 97-201, at 111 (1981), as reprinted in 1981-2 C.B. 352, 358.<sup>3</sup> In particular, Congress sought to encourage research activity that would not otherwise have been undertaken. See Union Carbide Corp. & Subs. v. Commissioner, T.C. Memo. 2009-50, 97 T.C.M. (CCH) 1207, 1252, aff'd, 697 F.3d 104 (2d Cir. 2012). For amounts paid or incurred in tax years beginning in 2021 or earlier, as here, section 174

<sup>&</sup>lt;sup>3</sup> The research credit was originally added as section 44F to the 1954 Code by the Economic Recovery Tax Act of 1981, Pub. L. No. 97-34, § 221(a), 95 Stat. 172, 241. The credit was recodified at section 30 by the Deficit Reduction Act of 1984, Pub. L. No. 98-369, § 471(c), 98 Stat. 494, 826. The current version of the credit is found at section 41. *See* Tax Reform Act of 1986, Pub. L. No. 99-514, § 231, 100 Stat. 2085, 2173–80 (amending the research credit and renumbering its section as section 41).

**[\*6]** permitted taxpayers to currently deduct certain business-related research and experimental expenditures, rather than capitalizing them. For amounts paid or incurred in tax years beginning after 2021, section 174 generally requires capitalization of such expenditures, with amortization of the cost generally over five years. *See* Tax Cuts and Jobs Act of 2017, Pub. L. No. 115-97, § 13206, 131 Stat. 2054, 2111–13.

The section 41 credit is generally calculated as 20% of any excess of the taxpayer's "qualified research expenses" for the tax year over a prescribed "base amount." I.R.C. § 41(a)(1). Qualified research expenses must be appropriately related to "qualified research," encompassing activities that meet all of the following four threshold tests: (1) the section 174 test, (2) the technological information test, (3) the business component test, and (4) the process of experimentation test. I.R.C. § 41(d); *Max v. Commissioner*, T.C. Memo. 2021-37, at \*28 & n.10 (citing *Siemer Milling Co. v. Commissioner*, T.C. Memo. 2019-37, at \*19).

The first test (section 174 test) requires that the expenditures involved in the research qualify as "research or experimental expenditures" under section 174.4 The regulations under section 174 provide that "[e]xpenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product." Treas. Reg. § 1.174-2(a)(1). "Product" is defined to include "any pilot model, process, formula, invention, technique, patent, or similar property." Id. subpara. (3). The second test (technological information test) requires that the research be undertaken for the purpose of discovering information of a technological nature. I.R.C. 41(d)(1)(B)(i). The third test (business component test) requires that the taxpayer intend the discovered information "to be useful in the development of a new or improved business component of the taxpayer." I.R.C. § 41(d)(1)(B)(ii). The fourth test (process of experimentation test) requires that substantially all of the activities involved in the research constitute a process of experimentation for a purpose related to performance, reliability,

<sup>&</sup>lt;sup>4</sup> The version of section 41 in effect during the years in issue referred to "expenses under section 174," and section 174 at those times referred to "research or experimental expenditures." The present version of section 41 refers to "specified research or experimental expenditures under section 174," I.R.C. § 41(d)(1)(A), and the present version of section 174 likewise refers to "specified research or experimental expenditures." All further citations in this Opinion refer to the statutes as in effect during the years in issue.

[\*7] quality, or a new or improved function, but not related to style, taste, cosmetic, or seasonal design factors. I.R.C. § 41(d)(1)(C), (3).

However, regardless of whether activities satisfy all four of these tests, they will nonetheless fail to constitute qualified research if they fall into any of the eight excluded categories of section 41(d)(4), such as research "conducted after the beginning of commercial production of the business component," "related to the adaptation of an existing business component to a particular customer's requirement or need," or "related to reproduction [duplication] of an existing business component . . . from plans [or] blueprints," among others. I.R.C. § 41(d)(4)(A)-(C); see also Max, T.C. Memo. 2021-37, at \*47; Little Sandy Coal Co. v. Commissioner, T.C. Memo. 2021-15, at \*16 n.4, aff'd, 62 F.4th 287 (7th Cir. 2023).

# III. Business Component Test

Respondent asks us to focus on the business component test. Section 41(d)(2)(B) defines a business component as "any product, process, computer software, technique, formula, or invention which is to be—(i) held for sale, lease, or license, or (ii) used by the taxpayer in a trade or business of the taxpayer." Under this test, the qualifying research must be undertaken to discover information useful in the development of a new or improved product, process, technique, etc. See Siemer Milling Co., T.C. Memo. 2019-37, at \*22.

Respondent asks the Court to rule that HCC fails the business component test on any of the following alternative grounds:

- 1. The buildings and facilities constructed by HCC never belonged to HCC, yet only these structures (and not the designs created by HCC) were "new or improved."
- 2. HCC's designs were not "products," as that word is intended in the statute, but rather "tangible manifestation[s] of construction services."
- 3. Neither HCC's designs nor the facilities it constructed were ever "held for sale" by HCC.
- 4. HCC did not "use" its designs in the sense intended by the statute, because Congress meant for taxpayers' use of business components to be "meaningful" and so "affect the way a business operates to some degree." Respondent

# [\*8] alleges that "HCC's day-to-day operations were not changed by its designs."

#### IV. Analysis of Respondent's Arguments

We will take each of Respondent's arguments in turn, keeping in mind that in considering this Motion for Partial Summary Judgment we must construe factual materials and inferences drawn from them in the light most favorable to the Harpers.

First, Respondent's contention that HCC's designs (as distinct from the constructed facilities) were never "new or improved" is contradicted by the record. HCC evidently engaged in a lengthy, multistep process of conceptual design and design development for each project, resulting in novel ideas and iterative improvements to them. We have consistently held that to be useful in the development of a new or improved business component the research need only provide some level of functional improvement in establishing the business component element. I.R.C. § 41(d)(1)(B)(i); *Norwest Corp. & Subs. v. Commissioner*, 110 T.C. 454, 495 (1998) ("[I]t is evident that Congress intended only that the taxpayer's activities provide some level of functional improvement, at a minimum."); *Union Carbide Corp. & Subs.*, 97 T.C.M. (CCH) at 1255.

To illustrate the dilemma faced by the Court in evaluating this Motion for Partial Summary Judgment, we recite below a sample of the project descriptions provided by the Harpers (which we take as true for purposes of ruling on the present Motion). We cannot, on the record before us, dispel the notion that the designs that HCC developed for these projects could be new or improved:

The Marine Corps Recruit Depot (MCRD) Complex. The Harpers report that HCC conducted research to determine "the appropriate design of the site's drainage system to provide an efficient and cost-effective storm water drainage design solution."

The Yuma Hangar. The Harpers report that HCC conducted research to design a "cockpit air supply (CAS) system that distributed air underneath the hangar at the proper temperature and air pressure, and withstood the soil condition."

[\*9] Mission Command Training Center. The Harpers report that in order to "meet secure network and systems certification" for a battlefield-simulation facility, HCC "designed the facility's walls with panels on both sides of the wall."

*Tactical Equipment Maintenance Facility.* The Harpers report that for this facility, HCC "designed numerous skylights installed into the roof, light wells, and vertical light shafts to carry the natural light into the interior spaces on the first floor to maximize energy efficiency."

*Pendleton BEQ Package 5.* The Harpers report that HCC "incorporated various elements into the final design such as Photovoltaic ('PV') panels connected to carport roofs, underground retention chambers for water collection, and formaldehyde-free particle boards to improve performance and environmental efficiencies."

While the designs that HCC produced for these facilities may or may not run afoul of other restrictions for claiming a credit for qualified research expenses, they could be construed as processes, techniques, or inventions that would constitute a business component of HCC's operations; and it is further possible they were processes, techniques, or inventions replicated and used in HCC's business. *See* I.R.C. § 41(d)(2)(B). The same is true with the remaining project descriptions (not recited here). On the record before us, we cannot rule out these possibilities.

As to Respondent's second argument, we agree that HCC's designs were not "products." The designs cannot be products because that term—when used in business or economic contexts—typically denotes a physical object made for sale to customers. See, e.g., Product, The Oxford Dictionary and Usage Guide to the English Language (1995) (defining "product," in relevant part, as a "thing or substance produced, esp. by manufacture"); Product, Oxford English Dictionary (2d ed. 1989) ("That which is produced by any action, operation, or work; a production; the result. Now freq. that which is produced commercially for sale."); Product, Black's Law Dictionary (7th ed. 1999) ("Something that is distributed commercially for use or consumption and that is usually (1) tangible personal property, (2) the result of fabrication or processing, and (3) an item that has passed through a chain of commercial distribution before ultimate use or consumption."); Product, Merriam-

**[\*10]** Webster's Dictionary, https://www.merriam-webster.com /dictionary/product (last visited Apr. 21, 2023) ("something produced especially: commodity"). However, as we noted above, the designs could still potentially constitute processes, techniques, or inventions, all of which are included in the definitional list of business components. See I.R.C. § 41(d)(2)(B). The failure of HCC's designs to constitute products would not by itself entitle Respondent to a determination that HCC's designs did not meet the business component test.

Third, the record before the Court does not contain any of the construction contracts for the projects at issue. Therefore, we cannot establish whether HCC ever owned the building facilities and structures it constructed before conveying them to its clients. Respondent asserts that "HCC did not build a building then transfer title to the buyer; it built a building on behalf of someone else, on land owned by that other party." Respondent supports this assertion by extrapolating from HCC's contracts in 2008 and 2010—whereas this case concerns projects in 2012 and 2013. HCC reports that "[s]tructures and facilities built by HCC, while custom built to specifications and requirements, [were] sold." Mr. Harper also submitted a declaration stating, among other things, that the facilities built by HCC were "built to be sold to the ultimate owners." While it seems implausible that buildings constructed on government and private property under a bid process were ever owned by HCC, the record before us does not conclusively establish ownership status. Regardless, as we explained above, even if HCC did not develop any "products" that it used or held for sale, we must still consider the processes, techniques, and potential inventions that HCC evidently developed. Because there is a dispute as to whether those processes, techniques, and potential inventions were used in HCC's business, we need not resolve ownership of the buildings and other structures for ruling on this Motion for Partial Summary Judgment.

Respondent's fourth argument—that HCC did not use its designs in the "meaningful" way intended by Congress—hinges on his conclusory and unevidenced assertion that "HCC's day-to-day operations were not changed by its designs." However, it is indisputable that HCC used its designs—the designs that were "permitt[ed] and approv[ed]" before building—in the construction process, in the sense of referring to and relying on them. Therefore, we must assume that by "day-to-day," Respondent means to refer to habitual use.

The plain meaning of "use" belies Respondent's contention that section 41(d)(2)(B)(ii)—according to which a business component, if it is

[\*11] not "held for sale, lease, or license," must be "used by the taxpayer in a trade or business of the taxpayer"—requires some habitual availment. Nothing in the statute itself indicates that Congress is using the word "use" in such a special way, and we have found no contemporary dictionary definitions of "use" that clearly conform with Respondent's interpretation.<sup>5</sup> Respondent supports his interpretation of "use" by gesturing to the legislative history, particularly Congress' evident intent for the credit for increasing research activities to stimulate economic growth. However, where an undefined statutory term has a clear and unambiguous meaning on its face, we do not look past that meaning to the legislative history. As the Supreme Court has stated:

In statutory interpretation disputes, a court's proper starting point lies in a careful examination of the ordinary meaning and structure of the law itself. *Schindler Elevator Corp. v. United States ex rel. Kirk*, 563 U.S. 401, 407 (2011). Where . . . that examination yields a clear answer, judges must stop. *Hughes Aircraft Co. v. Jacobson*, 525 U.S. 432, 438 (1999).

*Food Mktg. Inst. v. Argus Leader Media*, 139 S. Ct. 2356, 2364 (2019). Accordingly, we reject Respondent's invitation to accord the word "use" a specialized definition in the business component test.<sup>6</sup>

From the existing record, it appears that HCC may have conducted research to develop new or improved processes, techniques, and possibly inventions that it used in its construction business.

<sup>&</sup>lt;sup>5</sup> In the Oxford English Dictionary's entry for "use" (as a verb), no definition *requires* habitualness, regularity, or indefiniteness, although some definitions include such characteristics with an "especially" qualification. *See, e.g., Use, Oxford English Dictionary* (3d ed. 2011, rev. Mar. 2023), https://www.oed.com/view/Entry/220636 ("I.5.b. To carry out or carry on (an action or activity), esp. regularly or habitually . . . Now *rare.*"; "II. To put to practical or effective use; to make use of, employ, esp. habitually."). We will not import a possible connotation of "use" into its denotation absent an explicit indication of congressional intent.

<sup>&</sup>lt;sup>6</sup> We likewise note that in one of the few cases discussing the business component test, the taxpayer was not required to demonstrate that it habitually sold products of the same type as the one at issue for meeting the business component test of section 41(d)(2)(B)(i). See Trinity Indus., Inc. v. United States, 691 F. Supp. 2d 688, 691 (N.D. Tex. 2010), aff'd in part, vacated and remanded in part on other grounds, 757 F.3d 400 (5th Cir. 2014). (Trinity Industries, Inc., designed and built prototype "first in class" ships according to customer contracts. It hoped to build and sell duplicates, but it had no guarantee of realizing that hope.)

**[\*12]** Respondent has pointed to no evidence tending to show that the Harpers' claimed credit for increasing research activities did not satisfy the business component test of section 41(d)(1) and (2).

# Conclusion

We will deny Respondent's Motion for Partial Summary Judgment, as we do not find grounds for ruling as a matter of law that the HCC projects at issue failed the business component test of section 41(d).

We have considered all other arguments made by the parties and, to the extent not discussed above, we find those arguments to be irrelevant, moot, or without merit. To reflect the foregoing,

An appropriate order will be issued.