No. 12-____

IN THE

# Supreme Court of the United States

UNION CARBIDE CORPORATION AND SUBSIDIARIES,

*Petitioner*,

v.

COMMISSIONER OF INTERNAL REVENUE,

*Respondent*.

**On Petition for a Writ of Certiorari to the United States Court of Appeals for the Second Circuit**

## PETITION FOR A WRIT OF CERTIORARI

HAROLD J. HELTZER
*Counsel of Record*
ROBERT L. WILLMORE
CLIFTON S. ELGARTEN
CROWELL & MORING LLP
1001 Pennsylvania Ave., N.W.
Washington, DC 20004-2595
(202) 624-2500
HHeltzer@crowell.com

*Counsel for Petitioner*

WILSON-EPES PRINTING CO., INC. – (202) 789-0096 – WASHINGTON, D. C. 20002

## QUESTIONS PRESENTED

Designed by Congress to spur research by U.S. industry, I.R.C. § 41 creates a tax credit for qualified research expenses that exceed a base amount. Qualified research expenses include costs for "supplies used in the conduct of qualified research." I.R.C. § 41(b)(2)(A)(ii). Rejecting the plain meaning of the statutory language, "used in the conduct of qualified research," the Second Circuit held that *Auer v. Robbins*, 519 U.S. 452 (1997), required the court to defer to the position that the IRS articulated for this litigation: that one of its regulations, excluding "indirect" research costs from the credit, meant that only supplies purchased for research, not all supplies used in the research, qualified for the credit.

1. In determining the scope of the credit provided under I.R.C. § 41, did the Court of Appeals err in holding that "supplies used in the conduct of qualified research" includes only the cost of additional supplies specifically purchased for the research, thereby largely eliminating the credit afforded for supplies used in plant-scale testing?

2. Did the Court of Appeals err in deferring to the government's position with respect to the meaning and application of one its own regulations, without independently conducting any searching inquiry into what that the regulations mean, in a case where the government advanced that position as a financially interested party?

## PARTIES TO THE PROCEEDING

Petitioner before the United States Tax Court and Appellant before the Second Circuit was Union Carbide Corporation and Subsidiaries.

Respondent before the United States Tax Court and Appellee before the Second Circuit was the Commissioner of Internal Revenue.

## RULE 29.6 STATEMENT

Petitioner Union Carbide Corporation and Subsidiaries states that it is a wholly owned subsidiary of The Dow Chemical Company.

TABLE OF CONTENTS

TABLE OF CONTENTS—Continued

TABLE OF AUTHORITIES

TABLE OF AUTHORITIES—Continued

TABLE OF AUTHORITIES—Continued

IN THE

# Supreme Court of the United States

No. 12-____

UNION CARBIDE CORPORATION AND SUBSIDIARIES,
*Petitioner*,

v.

COMMISSIONER OF INTERNAL REVENUE,
*Respondent*.

**On Petition for a Writ of Certiorari to the United States Court of Appeals for the Second Circuit**

## PETITION FOR A WRIT OF CERTIORARI

Petitioner Union Carbide Corporation and Subsidiaries (UCC) respectfully petitions for a writ of certiorari to review the judgment of the United States Court of Appeals for the Second Circuit in this case entered on September 7, 2012.

## OPINIONS BELOW

The decision of the United States Court of Appeals for the Second Circuit (App. 1a-12a) is reported at 697 F.3d 104 (2d Cir. 2012). The decision of the United States Tax Court (App. 15a-275a) is reported at 97 T.C.M. (CCH) 1207 (2009).

## JURISDICTION

The Tax Court had jurisdiction over the issues pursuant to I.R.C. § 6512(b). The Court of Appeals

had jurisdiction pursuant to I.R.C. §§ 7482(a)(1) and 7483. This Court has jurisdiction under 28 U.S.C. § 1254(1).

## STATUTORY AND REGULATORY PROVISIONS INVOLVED

The relevant portions of I.R.C. § 41 and the Internal Revenue Service's regulations, Treas. Reg. § 1.41-1, *et seq.*, are set forth in the appendix, App. 279a-342a.

## STATEMENT

Since 1981, I.R.C. § 41 has provided a tax credit to taxpayers to encourage expansion of research and development efforts. Among the types of research for which the credit is available is experimentation to improve manufacturing processes. This process research is vital to America's manufacturing sector, which has been the principal user of this tax credit. Upon a demonstration that the taxpayer has engaged in "qualified research," the taxpayer may claim a credit based on the difference between its expenditures on the qualified research in the tax year, on the one hand, and a base amount, on the other.

The credit is measured strictly by *inputs* into the experimental process, i.e., expenditures for supplies and labor used in the experiment. It is *not*, in any respect, structured around *gains* and *losses*. A taxpayer that devotes an additional $10 million (over the base amount) into converting lead into gold may claim a portion of that $10 million as a credit if its experiment qualifies and its experimental process fails. But it can also claim the credit if its experiment is wildly successful, generating billions in mass produced gold, which it sells on the open market.

Either way, the credit is measured by the labor and supplies used in conduct of the research.

Petitioner UCC is a major chemical company. The research at issue here involved UCC's efforts to improve various production processes in its chemical plants. Petitioner claimed, as part of the computation of the credit, the cost of "supplies used in the conduct of [the] qualified research," as allowed by the statute. *See* I.R.C. § 41(b)(2)(A)(ii). Specifically, it claimed the cost of raw materials used in the production process that was subject to experimentation. The Second Circuit panel rejected the claimed credit because the "research was conducted on products that were in the process of being manufactured for sale and were in fact sold" (App. 1a), or, as it stated later, "the costs of supplies [were costs] that the taxpayer would have incurred regardless of any qualified research it was conducting." App. 10a.

The Second Circuit panel began by rejecting "dictionary definitions" of the statutory term "used in." The panel's finding of ambiguity rested not on an interpretation of the language Congress actually used to structure the credit, but rather on its "first blush" sense of how the statute should work. App. 7a. It found its view supported by the heading to I.R.C. § 41. App. 7a-8a.

Having found ambiguity, the court allowed the government to rely on its regulations and held that *Auer v. Robbins*, 519 U.S. 452 (1997), required it to defer to the government's litigating position on the meaning of those regulations. Specifically, in its brief, the government asserted that Treas. Reg. § 1.41-2(b)(1), which simply excludes "indirect research expenditures" from the credit, controlled the issue in this case because the regulation should be read to

exclude any supplies used in the experiment that would have been used regardless of any research activities. App. 9a. Indeed, the panel found that the absence of any definition of "indirect research expenditures" in the agency's own regulations gave the government the latitude to define the term in a "legal brief" in such as way as to support the government's position. *Id.* at 9a-10a. This deference was said to be owed to the government's view, notwithstanding that the government was a party to the case with a financial stake in the outcome.

Given its view that it was ultimately required to defer to the government's litigating position, rather than decide the issue itself, the Second Circuit did not conduct any searching inquiry into the meaning of the cited regulation. It did not check the government's position against the statutory language or independently consider the meaning of the cited regulation. Nor did it examine the cited regulation in light of other regulations of the agency bearing on the issue.[1] Rather, it contented itself with a determination under *Auer* that the government's asserted interpretation was not *inconsistent* with the regulation.

The result is that the Second Circuit panel has eviscerated a vital tax credit, rendering it trivial in the context of plant-based process research. It has done so by holding that the government, acting as an advocate in a case in which it is a party and has a

[1] The regulation offers several illustrations of "direct" and "indirect" support of research, all of which are consistent with Petitioner's view that "indirect" means tangential, *i.e.* not integral, to the experiment. *See* pages 30-32, *infra*. Rather than examine the regulations bearing on "indirectness," the panel deferred to what the government said "indirect" meant.

financial interest, is allowed to announce what the law means, with the courts providing what amounts to only a perfunctory examination of the *bona fides* of the government's position. Under the panel's view, the courts, entrusted by Congress with the task of resolving disputes between the taxpayer and the tax collector on issues of law, must instead simply defer to the tax collector's view, without conducting any serious inquiry into the meaning of the law being applied.

The Second Circuit's resolution of the legal issue reflects a misunderstanding of the courts' proper role under *Auer* when faced with the government's advocacy in support of its litigating position. Because *Auer* is the source of this confusion, this Petition asks the Court to provide guidance on whether deference is due the government's litigating position in a case in which the government is a party with a direct financial interest, and, if some deference is due, whether the court must nonetheless conduct a serious or searching inquiry into the *bona fides* of the government's views before bowing to those views.

### A. Statement of the Facts

#### 1. The Statutory and Regulatory Context

Congress first enacted I.R.C. § 41 in 1981, and has extended it fourteen times. The statute is, by its terms, designed to encourage American companies to step up their efforts in research and development, including by improving manufacturing processes. It provides an incentive, in the form of a tax credit, measured at 20 percent of the increase in qualified research expenses in the tax year over a base amount. I.R.C. § 41(a)(1). The base amount is determined using the ratio of qualified research expend-

itures over gross receipts for the years 1984 through 1988, but can never be less than 50 percent of the current year qualified research expenditures. I.R.C. § 41(c). The credit provides an important tax benefit to a company that has increased its research activities beyond the base amount.

Given that the credit is limited to 20 percent of the qualified research expenses in excess of the base amount, and that the base amount cannot be less than 50 percent of the qualified research expenses, the *maximum* amount of the credit is 10 percent of the qualified research expenses in the tax year. Moreover, where (as here) a portion of the credit reflects supplies that would otherwise be treated as costs of goods sold, and deducted on that basis, that deduction is reduced by the amount of the credit (alternatively, the rate of the credit can be commensurately reduced). I.R.C. § 280C(c). Thus, the net benefit is further reduced. Still, the incentive provided, because it is a credit, is important.

"Qualified research" is defined in I.R.C. § 41(d) and Treas. Reg. § 1.41-4(a). The statute sets forth a four-part test that experimentation must meet to be deemed qualified research, and the regulations elaborate on this test.

Once a taxpayer has identified qualified research, it must determine the qualified research expenses incurred in connection with that research in the tax year. The expenses that the taxpayer can include for this purpose are set forth in I.R.C. § 41(b) and Treas. Reg. § 1.41-2. I.R.C. § 41(b)(1) provides that qualified research expenses include "in-house research expenses." I.R.C. § 41(b)(2)(A), at issue here, provides that "in-house research expenses" include, among other things, "any amount paid or incurred for

supplies used in the conduct of qualified research." I.R.C. § 41(b)(2)(A)(ii). "Supplies" is broadly defined by I.R.C. § 41(b)(2)(C) as "any tangible property" other than land and improvements to land and property subject to depreciation.

Among the Treasury regulations promulgated under I.R.C. § 41 is the one ultimately relied upon by the agency and the Second Circuit: Treas. Reg. § 1.41-2. That regulation states that "[e]xpenditures for supplies or for the use of personal property that are indirect research expenditures or general and administrative expenses do not qualify as inhouse research expenses." Treas. Reg. § 1.41-2(b)(1). As the Second Circuit pointed out, the term "indirect" is not expressly defined. For the Second Circuit, failure to define these terms in the regulations opened the door wide to deference to the government's view on the meaning of the word "indirect" as advanced by the government in this litigation. The Second Circuit did not test the agency's position against related provisions of the same regulation. In actuality, the regulations offer a series of examples of services regarded as "direct" and "indirect." *See* Treas. Reg. § 1.41-2(c). Petitioner believes that these examples and related provisions negate the government's proposed interpretation of "indirect," and sets them out at App. 310a-312a.

### 2. The Importance Of Plant-Scale Research To Process Improvement

For a chemical company like UCC, research activities necessarily include experiments conducted in full-scale operating manufacturing plants. Plant-based experiments, designed to find ways to improve manufacturing processes, are conducted to evaluate a new technology in a manufacturing facility while that

facility is in normal commercial operation processing supplies into finished products. The varying size and dimensions of plant equipment, the inherent unpredictability of chemical reactions, and numerous operating uncertainties make it impossible simply to extrapolate laboratory or pilot plant results to the commercial plant setting.

The IRS does not dispute that plant-based process research qualifies for the research credit. However, it seeks to restrict the definition of supplies used in the conduct of plant-based process research to such an extent as to make the credit trivial in comparison to the supplies that must be placed at risk of loss when conducting this type of research. Plant-based process research nearly always involves experimentation performed while the plant is in operation. This means that the experiment may involve the same types of supplies (including raw materials and feedstock) that would be used when the plant is operating under normal conditions.

The evaluation of the experimental manufacturing process cannot be performed without simultaneously using those supplies. Sometimes, as the Second Circuit found decisive, that output will meet commercial standards and can be sold as finished product. Other times – as was the case for one of the experiments here – if the process research fails or is only partially successful, some or all of the output is off-grade scrap. And, of course, on other occasions, the experiment might be wildly successful, generating increased quantities, improved products, and greater productivity. Because process research is meant to resolve uncertainties, such experimentation inevitably creates risks that the supplies used in the research will not result in a product meeting com-

mercial standards. But, regardless of the outcome, the experiments necessary to conduct the research cannot be done without the use of these supplies.

### 3. UCC's Experiments

In its Tax Court petition, UCC claimed research credits for 106 research projects conducted in the tax years 1994 and 1995. For purposes of addressing the issues, UCC and the IRS agreed to try five of the largest projects, including the two that remain at issue on this Petition. The Tax Court found that both of these projects met the rigorous standards of qualified research.

The first is the Amoco anticoking project. This was conducted on industrial furnaces used to produce ethylene. Ethylene is made by applying very high temperatures to raw petroleum feeds in the cracking coils of a furnace. To combat the formation of coke, a byproduct that harms equipment and diminishes production yields, UCC twice pretreated the cracking coils with a compound developed by a third-party. The production process was fully completed on each occasion. It yielded, in essence, a normal amount of ethylene. However, UCC ultimately concluded that the anticoking pretreatment did not diminish the creation of coke in the furnace and discontinued the research. *See* App. 36a-46a.

A second project was the UCAT-J project. UCC tried to lower costs in the production of high-grade polyethylene products by using UCAT-J instead of M-1 as a catalyst in the normal production process. Although the UCAT-J runs required less hydrogen than the M-1 runs, many of the nineteen runs that comprised the UCAT-J project caused extensive operational problems and resulted in the production

of substantial amounts of off-grade polyethylene. *See id.* at 70a-109a.

### B. Procedural History

#### 1. The Tax Court Decision

After a multi-week trial, the Tax Court passed judgment on the five experiments. With respect to two experiments, the court held that the experiments did not involve sufficient uncertainty to constitute "qualified research" under I.R.C. § 41(d), and no appeal was taken from that ruling. With respect to a third, the sodium borohydride project, the Tax Court held that it did not involve a "process of experimentation," and, therefore, did not constitute "qualified research." App. 210a-213a. The Second Circuit affirmed that ruling.

With respect to the two projects addressed in this Petition, the Tax Court found that they were indeed qualified research projects, involving qualified research expenses. However, the Tax Court declined to allow the cost of the raw materials used in the experiments to count toward the credit as an "amount paid or incurred for supplies used in the conduct of qualified research." *Id.* at 253a-262a. The Tax Court acknowledged that the experiments could *not* have been conducted without those supplies. Nonetheless, it found decisive that these materials were "used to make finished goods" and "would have been purchased regardless of whether [UCC] was engaged in qualified research." *Id.* at 257a.

#### 2. The Second Circuit Opinion

The Second Circuit panel, in an opinion by Korman, D.J., affirmed. The panel held that the creditable supplies should be limited to supplies pur-

chased specifically for the experiment – which it characterized as "incremental" costs – and not extend to supplies for use in the experiment that produced saleable goods. It accepted the agency's position, as asserted in this litigation, that expenditures for such supplies should be regarded as "indirect" expenditures and excluded from the computation of the credit under the regulations.

At the outset, the panel noted that Petitioner relied on the plain meaning of the words in the statute – "used in the conduct of qualified research." But the panel declined to "make a fortress out of the dictionary." App. 6a-7a (quoting *Cabell v. Markham*, 148 F.2d 737, 739 (2d Cir. 1945)). It stated its own initial view that the credit "only covers costs for supplies purchased for the purpose of conducting qualified research." *Id.* at 7a. The panel did *not*, however, explain what words – as opposed to instincts about how tax laws are supposed to work – supported that view. The panel cited the title of the statutory section – which refers to "increasing research activities" – as indicating that not all costs of supplies would be creditable. *Id.* at 7a-8a.

The panel resolved the case, however, not through an independent analysis of the language of the statute, or even by resort to legislative intent or history, but rather by citing the principle that "[w]e ordinarily give deference to an agency's interpretation of its own ambiguous regulations, even if that interpretation appears in a legal brief." *Id.* at 9a. The panel observed that the regulations excluded expenditures "for supplies . . . that are indirect research expenditures" from the definition of qualified research expenditures. The panel stated that Treasury had not defined "indirect research expenditures." More-

over, the panel declined to construe the regulation itself. Instead, citing *Auer v. Robbins*, 519 U.S. 452, 461-62 (1997), the panel held that the agency's position as first asserted *in this litigation* – that "indirect research expenses" includes the supplies used in these experiments, if they would have been used in non-experimental production activities – was entitled to deference. *Id.* at 9a. This was sufficient to decide the question because the panel found no reason why *Auer* deference did not apply to the agency's litigating position. The panel declined to examine the related regulations. It instead cited to a snippet of legislative history that it thought reasonably supported the agency's view and reiterated its own pre-conceived impression that Petitioner's position would grant UCC "an unintended windfall." *Id.* at 10a.

## REASONS FOR GRANTING THE WRIT

There are two main reasons why this Court should grant certiorari.

First, the underlying subject matter of the case, a tax credit designed to encourage innovation and competitiveness in manufacturing, warrants the Court's attention. The Second Circuit's decision drastically narrows the value of the credit by eliminating a wide swath of costs that form an essential part of plant-based process research, a necessary part of proving the viability of manufacturing process improvements. The result is that the credit is rendered trivial for the type of plant-scale production process research that is so important to manufacturing industries generally, and the chemical industry in particular.

The second reason to grant a writ of certiorari is that the Second Circuit's method of analysis presents troubling, recurring and important issues, already

described as worthy of examination by some members of this Court. The Second Circuit's decision to defer to the agency's litigating position, based on its reading of this Court' decision in *Auer* and its antecedents, meant that the Second Circuit never construed the statute (deferring to the agency's view that regulations made that inquiry unnecessary), and never construed the regulations either. Instead, it deferred to the agency's litigating position on the meaning of the undefined term "indirect research expenditures" in the regulations. If the Second Circuit panel had seriously examined the regulations, and especially if it had tested the regulations in light of the plain language of the statute, it would have found the agency's position supported by neither. There is no support in the regulations for the notion that "indirect research expenditures" carves out from the credit supplies that are used in the experiment but also are used to generate products. To the contrary, the regulations and the statute both confirm that any supplies directly used in the experiment – as the supplies at issue here were – count toward the credit.

The Second Circuit's reading of this Court's *Auer* precedents as requiring a seemingly extraordinary deference to the government's interpretation of a regulation in a case in which the government itself is a financially interested party, amounts to affording a naked preference to a government litigant over its non-governmental adversaries – permitting the government to place its thumb on the scales of justice. As commentators have observed, allowing the government to tell the courts what the law means presents troubling separation of powers questions. As applied to tax cases, it undermines the very basis for entrusting the resolution of disputes over tax law to the courts, rather than simply allowing the tax

collector to decide the law for itself. As this case demonstrates, this Court's guidance is required to clarify the duty of the courts to construe and apply the law when confronted with a request for deference to the government's litigating position in a case in which the government has a financial interest in the outcome of the litigation.

## I. This Case Presents Important Questions About The Scope Of A Vital Tax Credit Designed To Encourage Process And Product Research By American Industry.

For more than 30 years, the tax credit provided by I.R.C. § 41 has encouraged and rewarded research by American industry.[2] It is designed to reward taxpayers that increase their expenditures for research over time. In 2009, the last year for which the IRS has published data, 12,359 companies claimed the credit, for a total of almost $7.8 billion.[3] The leading industry sector claiming that credit is manufacturing, with $5.4 billion in claimed credits.[4]

---

[2] The credit was originally enacted as part of the Economic Recovery Act of 1981, Pub. L. No. 97-34, § 221, 95 Stat. 172, 241-47 (1981), which implemented "a program of significant multi-year tax reductions . . . to ensure economic growth in the years ahead." S. Rep. No. 97-144, at 11 (1981). Congress believed that "a substantial tax credit" for increased R&D would help overcome the resistance of businesses to initiate or expand research programs. *Id.* at 76-77; H.R. Rep. No. 97-201, at 111 (1981). In later extending the credit, Congress emphasized "that effective tax incentives for research and development must be a fundamental element of America's competitiveness strategy." H.R. Rep. No. 100-1104, at 88 (1988) (Conf. Rep.).

[3] SOI Tax Stats, Corporation Research Credit, Figure A. *See* http://www.irs.gov/uac/SOI-Tax-Stats-Corporation-Research-Credit.

[4] *See id.*, Table 1.

One of the most important forms of research performed by the manufacturing sector, and in particular by chemical companies, is production process research. Such research has the potential to increase the efficiency of manufacturing processes. Given scale-up problems, testing and experimentation in the laboratory alone, or even in pilot plants, typically is not sufficient to prove the viability of a process innovation. Therefore, it often is essential to test the potential process improvement in the context of full-scale production, placing the plant, the production supplies, and the production process at risk.

The Second Circuit's decision eviscerates the research credit provided by I.R.C. § 41 as applied to plant-based process research. A tax credit limited only to the supplies purchased specifically for, and used in connection with, a plant-scale process experiment, rather than all supplies used in the experiment, renders the credit trivial in connection with plant-wide experimentation. Here, for example, with respect to the UCAT-J project, the Second Circuit's decision would limit UCC's credit to the cost of the experimental catalyst itself, which is a small fraction of the overall cost of the project. Similarly, for the anti-coking experiment, the credit might be allowed for the cost of the anti-coking compound itself, also only a small fraction of the overall cost of the project. Such a small credit in relation to the actual costs of plant-based research would have negligible incentive effect. By comparison, a credit based on the expenditures for all of the supplies used in the experiment – limited to those directly used and essential to the experiment and chemical processes being examined – is significant, reflecting the size of the experiment and the risk borne by the company.

The Second Circuit panel characterized a credit based on the cost of all supplies used in an experiment as a "windfall" if the supplies used in the experiment were purchased for the production of saleable products. To prevent such a "windfall," the Second Circuit panel forced an interpretation on the statute and the regulations that would eliminate most of the supplies used in the conduct of a qualifying experiment. It acknowledged that its approach reflected its "first blush" view that the statute only "covers costs for supplies purchased for the purpose of conducting qualified research." App. 7a. It never tied that view to any language in the statute. Instead, the panel reached a conclusion that followed from its presupposition.

The panel's presupposition reflected a misunderstanding of how the credit is structured. The panel proceeded as if UCC's claim would allow UCC a credit for the entire cost of its raw materials used in the test production – the threatened "windfall." But there is no windfall. The credit for such process research does not cover the entirety of the raw material cost of goods sold. To the contrary, the I.R.C. § 41 credit at best offsets only a small fraction of the cost of supplies. It is limited to 20 percent of the portion of a taxpayer's research expenditures for the year that exceed the "base amount." Moreover, the *minimum* base amount for purposes of computing the credit is 50 percent of the research expenditures for the tax year. The result is the credit can offset, at most, only 10 percent of the expenditure for supplies. Moreover, the tax deduction otherwise allowable with respect to the supplies is reduced by the amount of the credit (or, alternatively, the credit is reduced by a

commensurate amount).[5] The result is a modest credit that serves as an incentive and reward but never a windfall, except in the sense that any credit is a windfall when compared to a deduction.

The panel's first blush inclination, however, was that, if the supplies were not specially purchased for the experiment, but were used in a process that produced goods for sale, no credit could be available. App. 7a. The credit would then be limited only to a small subset of the taxpayer's overall research costs.

The Treasury regulations clarifying that "indirect research expenditures or general or administrative expenses" do not qualify for the credit provides no support for the Second Circuit's conclusion. If a start-up company had conducted the same process research, but did not already have the supplies on hand, it would have had to purchase the identical supplies used by UCC and would have had output that it could have sold. These supplies are integral to the experiment and the resultant product is part of the very chemical reactions being examined. These expenses are not indirect expenditures under any reasonable interpretation of the term. As shown below, nothing in *Auer* – relied on by the panel – required or even permitted deference to the agency's contrary view.

Although Congress might have established a credit based on losses or special purchases, it did not do so.

---

[5] If the manufacturer used $100 worth of supplies in the experiment, its maximum credit would be $10. Moreover, assuming that the taxpayer paid tax at a 35 percent rate, that $10 credit would reduce its cost of goods sold by $10, thus increasing its taxes due by $3.50. Thus the maximum net benefit of the credit for $100 of eligible supplies is $6.50.

This credit is measured by inputs into the research. The credit computation includes all expenditures for "supplies used in the conduct of" a qualifying experiment and then allows a credit for, at most, a modest portion of those inputs. If the experiment succeeds and the taxpayer, as a result, produces valuable products that can be sold at a price that exceeds its investment, the company does not lose the credit, which continues to be based on the cost of the supplies "used in the conduct of" the experiment. If the company already had the supplies on hand, and conducted the research using those supplies (as it typically must do in conducting plant-level process research), the supplies are still used in the conduct of the research and properly included in computing the credit.

In rejecting recourse to the dictionary in construing the statute, the Second Circuit panel failed to explain what non-dictionary linguistic construction of the statutory language supported its conclusion. To conclude that supplies without which the qualified research cannot possibly be conducted are not "used in conduct of qualified research" is to abandon the statutory language entirely.

Contrary to the panel's first blush view, the credit is based on "incremental" expenditures in only one respect: The credit is measured by incremental expenditures *over the base amount*. The goal of the statute is to increase research *activities* – the activities that lead to the development of new products and processes that increase the intellectual capital of the country. That goal is achieved regardless of whether the taxpayer takes materials on hand for the research or purchases the materials only when needed for the research.

## II. This Case Presents Important Questions About Whether A Court May Simply Defer To An Agency's Litigation-Driven Interpretation Of Its Regulations Where The Agency Is A Party To And Has A Direct Financial Interest In The Outcome Of The Litigation.

This case raises important, recurring issues about the courts' responsibility to decide legal questions assigned to them for resolution. The courts do not properly acquit their assigned responsibility by simply deferring to the litigating position of one of the parties to the case. Where the government has offered its position on the meaning of its own regulations for the first time in its legal briefs in the case, and where the government has an interest in the outcome, the court should exercise independent judgment in deciding between the views of two self-interested parties on the meaning of the law, here the taxpayer and the tax collector.

Citing this Court's decision in *Auer*, 519 U.S. at 461-62, the Second Circuit panel held that it was required to "give deference to an agency's interpretation of its own ambiguous regulations, even if that interpretation appears in a legal brief." App. 9a. As applied by the Second Circuit, the existence of the regulation (if it was found to apply) meant that the court did not have to construe the controlling statute, but instead merely find it ambiguous. Moreover, the court did not have to attempt independently to construe the agency's regulations, which it viewed as "undefined." Rather, by virtue of the very vagueness and ambiguity of its own regulations, the government's fighting position in this litigation would prevail, subject only to a determination, under *Auer*,

that the government's position was not "inconsistent with" the regulations. *Id.* Here that amounted to no serious effort to interpret the regulation at all. *But see E.E.O.C. v. Arabian American Oil Co.*, 499 U.S. 244, 260 (1991) (Scalia, J., concurring) ("But deference is not abdication, and it requires us to accept only those agency interpretations that are reasonable in light of the principles of construction courts normally employ.").

*Auer* does indeed contain the cited passage on deference to the government's position as set forth in legal briefs, the primary inspiration for the Second Circuit's ruling. The general rule of deference to an agency's interpretation of its own regulations can, of course, be traced back further (at least to *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410 (1945)). Yet application of *Auer* deference in a case like this, in which the government has advanced its interpretation in legal briefs as a self-interested litigant, is far from clear.

In recent cases, this Court's analysis suggests that courts must engage in a searching and certainly serious inquiry into both the meaning of a regulation, and the rationale for deference, before bowing to the government's position. *See Christopher v. SmithKline Beecham Corp.*, 567 U.S. ___, 132 S. Ct. 2156, 2166-74 (2012) (concluding that *Auer* deference is inappropriate, and analyzing Fair Labor Standards Act and implementing regulations in rejecting DOL's interpretation of its regulations); *Talk America, Inc. v. Mich. Bell Tel. Co.*, 564 U.S. ___, 131 S. Ct. 2254, 2263 (2011) (analyzing meaning of regulation in determining that FCC interpretation of regulation was entitled to deference); *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261, 284-285

(2009) (deferring to EPA interpretation, as set forth in EPA memorandum, only after discussing five reasons for deference to memorandum). Indeed, this is precisely the approach to regulatory interpretation taken in *Seminole Rock*, where this Court identified two interpretive "tools" – the language of the regulations and the agency's prior interpretations of the regulations – and proceeded to thoroughly review the language of the regulations before considering the agency's interpretations to remove any doubt as to the Court's own construction of the regulation. *See Seminole Rock*, 325 U.S. at 414-18.

The need for at least some measure of serious scrutiny is obvious where the asserted position is advanced by the government solely in a legal brief. The need for serious scrutiny, and skepticism about the government's position, should be greater still where the government has ventured its position as a party in a litigation in which it has a direct financial interest. Where the courts have been assigned the responsibility to decide a legal dispute between the government and one of its citizens, deference cannot be justified as simply a preference for the views of the government over those of a private citizen. A naked preference for the prosecutor's view of the law over that of the private citizen is fundamentally inconsistent with the ideal of impartial courts.

If a preference is to be granted to the government in interpreting agency regulations, that preference can only be justified on the theory that the government's position reflects the considered judgment and expertise of an agency responsible for administering and promulgating regulations under the statute. *See Auer*, 519 U.S. at 462. Where the agency has structured its regulations with care and has announced its

interpretation in advance, by Federal Register notice, by memorandum, by bulletin, through an informal rule or guidance – suggesting that the agency has, in fact, applied its considered judgment to an issue within its area of expertise – a reasonable case can be made for deference to the government's objectively expressed and announced views.

Even then, a court's preference for the agency's view, over the citizen's view, of what the regulations mean raises separation of powers concerns. *See* Matthew C. Stephenson & Miri Pogoriler, *Seminole Rock's Domain*, 79 Geo. Wash. L. Rev. 1449 (2011); John F. Manning, *Constitutional Structure and Judicial Deference to Agency Interpretations of Agency Rules*, 96 Colum. L. Rev. 612 (1996) (both articles cited in *Christopher,* 132 S. Ct. at 2168). A motivating force underlying our constitutional separation of powers was the recognition that there is great risk of illegitimacy, or even tyranny, in allowing the person or entity that promulgates a law to interpret it as well. *See Talk America*, 131 S. Ct. at 2266 (Scalia, J. concurring). Thus, where cases are assigned to the courts for resolution, it is the duty of the courts – not one of the litigants, even if that litigant promulgated the regulation in question – to say what the law means.

There is no doubt that Congress assigned the resolution of disputes over the meaning of the tax laws to the judiciary, and not to the taxing authorities themselves. *See, e.g.*, I.R.C. §§ 7402 *et seq.* (U.S. district courts and U.S. Court of Federal Claims); 7441 *et seq.* (U.S. Tax Court). Moreover, where matters of taxation are at issue, it does not strain our historical imagination to expect courts to fully execute their constitutional responsibilities, and to

actually decide the issues of law presented to them, rather than simply bow to the tax collector. *See Haggar Co. v. Helvering*, 308 U.S. 389, 398 (1940) ("[j]udicial obeisance to administrative action cannot be pressed so far" as to allow court to adopt Commissioner's interpretation of revenue code provision where "the [Commissioner's] construction flies in the face of the purposes of the statute and the plain meaning of its words" and does not "embody the results of any specialized departmental knowledge or experience.")[6]

The case for deference is necessarily weak where the agency has not announced its interpretation in advance, and does so for the first time in litigation. Although the Second Circuit panel cited *Christopher*, 132 S. Ct. at 2166, it declined to note the Court's central caution in that case: Blind deference to an agency's interpretation of its regulations, presented for the first time in litigation, creates the "risk that agencies will promulgate vague and open-ended regulations that they can later interpret as they see fit, thereby 'frustrat[ing] the notice and predictability purposes of rulemaking.'" *Id.* at 2168 (citations omitted). That is exactly what the Second Circuit encouraged here when it cited the agency's failure to provide a definition of "indirect" as the jumping off point for granting broad deference to the government's litigating position in this case.

---

[6] It is unmistakably the role of the courts to decide the law, including tax law. *See White v. United States*, 305 U.S. 281, 292 (1938) ("It is the function and duty of courts to resolve doubts. We know of no reason why that function should be abdicated in a tax case more than in any other where the rights of suitors turn on the construction of a statute and it is our duty to decide what that construction fairly should be.").

Yet as weak as the case for deference is where the government asserts its position for the first time in litigation, that case must be at its *weakest* where the agency asserting the position is a financially interested party, as in this tax case. Significantly, in many of the recent cases in which this Court has deferred to the government's view as first expressed in litigation, that view was expressed as amicus curiae. *See, e.g., Talk America*, 131 S. Ct. at 2265; *Williamson v. Mazda Motor of Am., Inc.*, 562 U.S. ___, 131 S. Ct. 1131, 1137 (2011); *Chase Bank USA, N.A. v. McCoy*, 562 U.S. ___, 131 S. Ct. 871, 880 (2011). Indeed, *Auer* itself involved an amicus submission. 519 U.S. at 461. As these cases reflect, where the government appears as amicus, providing its view of its own regulations in an effort to assist the courts in resolving a dispute between private parties, the rationale for deference is stronger. There is reason to accept the government's views as reflecting both expertise and considered, independent judgment. *But see Christopher*, 132 S. Ct. at 2169-70 (declining to defer to interpretation advanced in an amicus brief).

Not so where the government is a litigant with an overt financial interest, as it does in its capacity as the tax collector. Where the government has a financial interest, the courts should *at least* approach their analysis of the government's position with skepticism – just as it would the equally self-interested position of the taxpayer. Certainly, there is historical precedent that, where the tax collector is seeking to extend his taxing authority, judicial skepticism is entirely appropriate. *See, e.g., Gould v. Gould*, 245 U.S. 151, 153 (1917) ("In case of doubt [statutes levying taxes] are construed most strongly against the government, and in favor of the citizen."). Where an agency is

a litigant with a strong financial interest in the outcome, the possibility that the agency is advancing a "convenient litigating position" cannot be ignored. Indeed, it is difficult to see how, in the context of litigation, under the guidance of the litigating attorneys, the agency could bring to bear the kind of considered, independent judgment that ought to be a prerequisite to deference.

Here, as shown below, the Second Circuit afforded *Auer* excessive effect. Having concluded that the decision did not fall within any *Auer* exception, it took the easy course and credited the agency's self-interested views, declining to examine the agency's regulations itself, and testing the agency's views only against a snippet of legislative history.[7] Even under *Auer*, this is too light a touch on the technical merits of the government's position, especially where the government has a direct financial interest in the outcome of the litigation. *See Auer*, 519 U.S. at 461 (measuring agency's position against plain meaning of regulatory language as evidenced in dictionary).

This Court should grant certiorari to address whether, or how, *Auer* deference applies, and what level of inquiry is required of a court, where the government presents a dispositive view of its own regulations solely as a self-interested litigant. This case presents a particularly good case for addressing this issue because the government's financial interest in the outcome is manifest, it has not suggested that

---

[7] The panel cites to a 1981 House Ways and Means Committee Report explaining the need for a substantial tax credit for "incremental" research and experimentation expenditures. App. 9a-10a. But, as discussed at page 33, *infra*, the term "incremental" as used in the Committee Report refers to the increase of research expenditures over the base amount.

it has offered its view of the regulations in any guidance predating this case, and the Second Circuit panel's opinion (as shown below) grants *Auer* deference without the slightest degree of critical analysis of the government's position.

### A. The Statute Is Inconsistent With The Agency's Litigating Position

In light of the agency's assertion that a Treasury regulation addressed the issue presented, the Second Circuit panel never construed the statute. The panel found the statutory language sufficiently ambiguous to allow regulations to govern. But the panel's finding of ambiguity improperly disregarded the dictionary definition of the words of the statute and rested on a misinterpretation of the *heading* to I.R.C. § 41.

Under any plain language approach, "supplies used in the conduct of qualified research" would include the supplies that are actually used in the experiment, critical to the experiment, and provide one or more of the chemicals that interact as part of the process being examined. The Second Circuit found this plain language meaning simplistic and rejected the dictionary definition.

The panel's dismissive approach to plain meaning is inconsistent with the courts' task and this Court's cases.[8] Dictionaries have their limits. But here the

---

[8] *See, e.g., Freeman v. Quicken Loans, Inc.*, 566 U.S. ___, 132 S. Ct. 2034, 2042 (2012) (interpreting Real Estate Settlement Procedures Act in accordance with words' "normal usage" and looking to "dictionary definitions"); *Taniguchi v. Kan Pacific Saipan, Ltd.*, 566 U.S. ___, 132 S. Ct. 1997, 2003 (2012) (interpreting Court Interpreters Act by ascertaining "ordinary meaning" from survey of definitions from various dictionaries); *FCC v. AT&T*, 562 U.S. ___, 131 S. Ct. 1177, 1182 (2011) ("When a

panel relied primarily on its own preconception that the credit should only apply to supplies specially purchased for the research. The panel never identified any words in the statute that supported its reading.

The panel cited only the heading of the statutory section – "Credit for increasing research activities," 26 U.S.C. § 41 – and specifically the word "increasing," as support for the idea that only supplies beyond those ordinarily used in producing goods for sale are creditable. Even assuming that the heading could have significance,[9] which the government itself did not suggest, it had no significance here. The heading refers to the basic purpose of the statute, which was to increase research activities beyond those in a base amount as established in earlier years. As noted above, the manner in which the statute determines if there has been an increase in qualified research is to compare the qualified amounts in the current year with a base amount rather than attempt to determine if the expenditure would or would not have been made without the credit.[10] That is why it uses the word "increasing" and why, for that matter, there are references in

---

statute does not define a term, we typically 'give the phrase its ordinary meaning.'").

[9] Section headings are generally not considered in interpreting the Code. *See United States v. Reorganized CF&I Fabricators of Utah, Inc.*, 518 U.S. 213, 222-23 (1996) (citing I.R.C. § 7806(b) and noting that government disclaimed any reliance on Code headings).

[10] Because the base amount must be determined in a manner consistent with the credit year (I.R.C. § 41(c)(6)(A)), if supplies such as raw materials are used to determine the research credit for the credit year, the same type of supplies must be used to determine the base amount. The credit can only apply to the excess of those research expenditures over the base amount.

the legislative history to incremental or additional expenditures.

The panel also noted a second subsection, which refers to the need to identify "qualified research" separately with respect to "each business component." *See* I.R.C. § 41(d)(2)(C). But the panel never suggested that this provision was the basis for its holding. Nor did the panel acknowledge the Treasury Regulation implementing this provision, Treas. Reg. § 1.41-4(b)(1), which clarifies that the purpose of I.R.C. § 41(d)(2)(C) is not to specify which supply expenditures are creditable, but to ensure that, in determining whether an experimental production process is "qualified research," the research activities relating to the process must be evaluated independently from the those relating to development of the product.[11]

In sum, there really was no ambiguity here. Nonetheless, having found ambiguity, the panel never returned to the statutory language. It deferred instead to the agency's assertion that it had adopted a regulation addressing the issue and to the agency's interpretation of that regulation. At a minimum, however, the plain language of the statute should have remained significant as the court considered the *bona fides* of the government's position that a regula-

---

[11] Treas. Reg. § 1.41-4(b)(1) provides in pertinent part:

> In cases involving development of both a product and a manufacturing or other commercial production process for the product, research activities relating to development of the process are not qualified research unless the requirements of section 41(d) and this section are met for the research activities relating to the process without taking into account the research activities relating to development of the product.

tion addressed the issue and resolved it in the government's favor. The panel failed to conduct the required inquiry because it never tested the regulation, as interpreted by the government, against the statute.

### B. The Panel Granted Far Too Much Deference To The Government's Litigation-Driven Interpretation Of The Regulation.

The panel declined to itself construe the regulations that the government invoked, notwithstanding that there was plenty in those regulations (and related regulations) to construe. *See* Treas. Reg. § 1.41-2(c). Instead, the panel accepted the government's interpretation as expressed in the briefs, subject only to finding something in the legislative history to render that view plausible. The snippet of legislative history that the panel relied on highlights the perfunctory nature of the panel's review.

The government relies on a regulation that states only that expenditures for supplies "that are indirect research expenditures or general or administrative expenses do not qualify as inhouse research expenses." Treas. Reg. § 1.41-2(b)(1).

That statement offers no support for the government's position. Indeed, the regulation does not truly interpret the statutory language in connection with the issue presented here. That is because expenditures for general and administrative expenses or indirect expenses, would not, in ordinary usage, be "used in the conduct of" an experiment. They are part of the general background cost of running the business. The regulation as written simply states the uncontroversial point that general and administra-

tive expenses, and indirect expenses, are not covered by the credit.

By comparison, supplies used in the experiment – upon which the experiment is conducted, which are part of the chemical reaction being judged, and without which the experiment cannot be performed – are not indirect. Light bulbs used in the plant are indirect supplies. Light bulbs that are the subject of the experiment are used in the experiment. Put simply, "indirectness" is a concept with which courts are familiar, and one would never confuse supplies used in an experiment with "indirect" supplies.

Notwithstanding that "indirectness" is ordinarily within the competence of courts to judge, the panel did not do so. It noted that the agency itself had done nothing to define "indirect." Because the agency had not posited a specific definition in its regulations, the panel granted the government license to create one here, stretching the meaning of indirect to reach UCC's facts and support the government's desired result in this case. Even under *Auer*, that was far too cursory a pass over the regulatory language, especially given the government's direct financial interest in the case. *See Auer*, 519 U.S. at 461 (measuring agency position against regulatory language).

If the panel had conducted a reasonable inquiry and examined the related regulations, it would have found substantial guidance on the meaning of "indirect," none of which supported the government's litigation-driven interpretation. To the contrary, all of the guidance suggests that "indirect" means, in essence, tangential. The very next subsection of the regulation, Treas. Reg. § 1.41-2(c)(3)(ii), describes services in "direct" support of qualified research activities, and contrasts it with services deemed to be

only "indirect" support (and not allowable). Services in "direct" support include services of "persons engaging in actual conduct of qualified services," as well as persons directly supervising such persons. Specific examples include "services of a secretary for typing reports describing laboratory results derived from qualified research, of a laboratory worker for cleaning equipment used in qualified research, of a clerk for compiling research data, and of a machinist for machining a part of an experimental model used in qualified research." *Id.* It then provides:

> Direct support of research activities does not include general administrative services, *or other services only indirectly of benefit to research activities*. For example, services of payroll personnel in preparing salary checks of laboratory scientists, of an accountant for accounting for research expenses, of a janitor for general cleaning of a research laboratory, or of officers engaged in supervising financial or personnel matters do not qualify as direct support of research.

*Id.* (emphasis added).

Nothing in these examples speaks in terms of "incremental" expenditures. The term "direct" – particularly compared to the examples used to describe "indirect" – refers *not* to "incremental" expense, but to whether the machinist, secretary, or maintenance person had a role in the conduct of the qualified research. All of these individuals were presumably on staff, and would have been paid,

whether or not the experiment was performed.[12] Nonetheless, the cost of their efforts are to be taken into account in computing the credit. Had the panel engaged in a reasonable inquiry into the meaning of the terms "direct" and "indirect" as used in the regulation, it would have discovered that those terms were not ambiguous in the sense it mistakenly believed them to be.[13] By simply deferring to the IRS's interpretation instead, the panel allowed the IRS to create a *de facto* new regulation regarding the meaning of the statutory phrase "supplies used in the conduct of qualified research" through the backdoor of *Auer* deference.[14]

---

[12] Because they would have been paid regardless of whether the research took place, their salaries presumably are "indirect research expenditures" under the government's position to which the panel deferred. Yet the regulation expressly treats each of their roles as directly in support of the research, and their salaries thus qualify for the research credit.

[13] In fact, there is legislative history on point, using the same illustrations as now appear in Treas. Reg. § 1.41-2(c)(3)(ii). Thus, H.R. Rep. No. 97-201 describes:

> By way of illustration, supplies eligible for the credit include supplies used in experimentation by a laboratory scientist, in the entering by a laboratory assistant of research data into a computer as part of the conduct of research, or in the machining by a machinist of a part of an experimental model. On the other hand, supplies used in preparing salary checks of laboratory scientists or in performing financial or accounting services for the taxpayer (even if related to individuals engaged in research) are not eligible for the new credit.

*Id.* at 117-18.

[14] "*Auer* deference is warranted only when the language of the regulation is ambiguous." *Christensen v. Harris Cnty.*, 529 U.S. 576, 588 (2000). Where the regulation is not ambiguous, "[t]o defer to the agency's position would be to permit the agency,

The Second Circuit's recourse to legislative history was nearly as cursory as its examination of the agency's regulations. It cited Judge Katzmann's speech extolling legislative history and referred to a single sentence from the House Committee Report: The "substantial tax credit for incremental research and experimental expenditures will overcome the resistance of many businesses to bear the significant costs of staffing, supplies, and certain computer charges which must be incurred in initiating or expanding research programs." H.R. Rep. No. 97-201, at 111. But this quotation offers no support for the government's interpretation of "indirect" because the reference to "incremental" expenditures refers to the increment over the base amount. *See id.* (explaining that "[t]he credit applies only to the extent that the taxpayer's qualified research expenditures for the taxable year exceed [the base amount]," and that "[t]he rate of the credit . . . is 25 [now 20] percent of the incremental research expenditure amount.")

In sum, the Second Circuit gave *Auer* excessive force, and thus gave the government's position excessive deference. This Court should grant certiorari to clarify whether or how *Auer* applies to interpretations of agency regulations advanced by the government where the courts have been assigned the task of deciding the legal issue and the government advances its view as a financially interested party to the case.

---

under the guise of interpreting a regulation, to create *de facto* a new regulation." *Id.*

## CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

HAROLD J. HELTZER
*Counsel of Record*
ROBERT L. WILLMORE
CLIFTON S. ELGARTEN
CROWELL & MORING LLP
1001 Pennsylvania Ave., N.W.
Washington, DC 20004-2595
(202) 624-2500
HHeltzer@crowell.com

*Counsel for Petitioner*

December 2012

# APPENDIX

# APPENDIX A

UNITED STATES COURT OF APPEALS,
SECOND CIRCUIT

---

Docket No. 11-2552

---

UNION CARBIDE CORPORATION AND SUBSIDIARIES,
*Petitioner-Appellant*,

v.

COMMISSIONER OF INTERNAL REVENUE,
*Respondent-Appellee*.

---

Argued: March 29, 2012
Decided: Sept. 7, 2012

---

Before: STRAUB and POOLER, Circuit Judges, and KORMAN, District Judge.*

Judge POOLER concurs in the judgment and opinion of the Court and files a separate concurrence.

EDWARD R. KORMAN, District Judge:

Union Carbide Corporation ("UCC") conducted three research projects at two production plants in Hahnville, Louisiana, during the 1994 and 1995 tax-credit years. The research was conducted on products that were in the process of being manufactured for sale and were in fact sold. Nevertheless, UCC requested a

---

* The Hon. Edward R. Korman, Senior United States District Court Judge for the Eastern District of New York, sitting by designation.

research credit not just for the additional costs of supplies associated with the research. Instead, it requested a research credit for the costs of all the supplies used in the production of the product even though those supplies would have been used regardless of any research performed. Indeed, the crux of UCC's argument is captured in the following colloquy with UCC's able counsel at oral argument:

> Q: But if I understand you correctly, you're saying everything that was used to manufacture the [product], even though you were going to do that anyway and you presumably sold the product, you should still get the research credit?
>
> A: Absolutely your honor.
>
> Q: In its entirety? The entire amount spent for the supplies . . . all the supplies you paid for, in your view, are entitled to the credit even though . . . they were used to produce a product which you sold anyway?
>
> A: Yes.

Oral Argument at 11:06:46-11:07:28, *Union Carbide Corp. and Subsidiaries v. Comm'r* (2d Cir. No. 11-2552). The Tax Court held that UCC was not entitled to research credits for the entire amount spent for the supplies. Instead, as the Commissioner argues, it was entitled to a credit for only those additional supplies that were used to perform the research. We agree.

## BACKGROUND

We provide a only a brief description of the production projects on which the research was performed because of their complex and technical nature and because a full description is not necessary to the resolution of this appeal. The first is the Amoco

anticoking project. This was conducted on industrial furnaces used to produce ethylene. Ethylene is made by applying very high temperatures to raw petroleum feeds as they are injected into cracking coils in a furnace. To combat the formation of coke, a harmful byproduct of this process that harms equipment and diminishes production yields, UCC twice pretreated the cracking coils with a compound developed by Amoco. The production process was fully completed on each occasion and yielded a normal amount of ethylene, after which UCC concluded that the anticoking pretreatment did not diminish the creation of coke in the furnace and discontinued the research.

The second project was the UCAT–J project, by which UCC attempted to lower costs in the production of high-grade polyethylene products. The project, run nineteen times, involved using UCAT–J instead of M–1 as a catalyst in the normal production process. Although the UCAT–J runs required less hydrogen than the M–1 runs, both runs required approximately the same amount of ethylene, hexene, and butene. Ultimately, the UCAT–J project was discontinued because it caused operational problems and resulted in a higher than normal production of off-grade polyethylene.

Finally, the sodium borohydride project attempted to determine whether using sodium borohydride during the manufacture of crude butadiene would reduce the presence of acetaldehyde, an unwanted byproduct. Normally, acetaldehyde is removed by a gas system that has to be periodically shut down for cleaning. UCC ran the sodium borohydride test for two weeks and concluded that it successfully reduced acetaldehyde in the crude butadiene product and

would use the treatment during future shutdowns of the gas system, although its use was discontinued several years later for unrelated reasons.

After a bench trial, the Tax Court judge held, in relevant part, that costs for supplies used by UCC for the anticoking project and for the UCAT–J project were not creditable as an "amount paid or incurred for supplies used in the conduct of qualified research" under 26 U.S.C. § 41(b)(2)(A)(ii) because they were "[r]aw materials used to make finished goods that would have been purchased regardless of whether [UCC] was engaged in qualified research." *Union Carbide Corp. and Subsidiaries v. Comm'r*, 97 T.C.M. (CCH) 1207, 1273 (2009). Specifically, the Tax Court acknowledged that "the Amoco anticoking and UCAT–J projects could not have occurred if UCC had not purchased the raw materials it used in its production process, raw materials that UCC previously treated as inventory and deducted as costs of goods sold." *Id.* Nevertheless, the Tax Court held that

> this does not make the costs of these raw materials [qualified research expenses]. The definition of supplies [qualified research expenses] includes only amounts "paid or incurred for supplies *used in the conduct of qualified research*." Sec. 41(b)(2)(A)(ii) (emphasis added). Petitioner now seeks to include as [qualified research expenses] amounts incurred during the production process upon which the qualified research was conducted, not during the conduct of qualified research itself. These costs are, at best, indirect research costs excluded from the definition of [qualified research expenses] under section 1.41-2(b)(2) [of the Treasury Regulations].

*Id.* The Tax Court also held that UCC's sodium borohydride project did not fulfill "the process of experimentation test" as is required to show that it is qualified research because UCC did not perform any post-testing analysis or comparisons of the data collected. *Id.* at 1262. UCC now appeals.

## DISCUSSION

Whether UCC is entitled to prevail here turns on an interpretation of 26 U.S.C. § 41, which was enacted in 1981. *See* Economic Recovery Tax Act of 1981, Pub.L. No. 97-34, § 221, 95 Stat. 172 (1981). Specifically, section 41 provides for a research credit for, in relevant part, "any amount paid or incurred for supplies used in the conduct of qualified research" prior to December 31, 2011. *Id.* at §§ 41(b)(2)(A)(ii), (h)(1)(B). The Tax Court judge held, and it is not disputed here, that UCC's Amoco anticoking and UCAT–J projects were qualified research. *Union Carbide*, 97 T.C.M. (CCH) at 1260, 1266. The issue is whether UCC's costs for the supplies used during these projects that would have been used in the course of UCC's manufacturing process regardless of any research performed qualify as "an amount paid or incurred for supplies used in the conduct of qualified research." We hold that the costs for such supplies are not creditable.

Whether a statute is plain or ambiguous is "determined by reference to the language itself, the specific context in which that language is used, and the broader context of the statute as a whole." *Robinson v. Shell Oil Co.*, 519 U.S. 337, 341, 117 S.Ct. 843, 136 L.Ed.2d 808 (1997); *see also United States v. Gayle*, 342 F.3d 89, 93 (2d Cir.2003) (Katzmann, J.). "We have applied a similar approach in determining whether a provision of a contract is ambiguous.

Specifically, we have held that '[l]anguage is ambiguous when it is capable of more than one meaning when viewed objectively by a reasonably intelligent person who has examined the context of the entire integrated agreement.'" *Frank G. v. Bd. of Educ. of Hyde Park*, 459 F.3d 356, 368 (2d Cir.2006) (alteration in original) (quoting *O'Neil v. Ret. Plan for Salaried Emps. of RKO, Inc.*, 37 F.3d 55, 59 (2d Cir.1994)).

UCC argues that, under the plain language of 26 U.S.C. § 41(b)(2)(A)(ii), it is entitled to the cost of all supplies "used in the conduct of qualified research." Specifically, it argues that, "the plain and ordinary meaning of the term 'use' is to 'put into action or service,' 'employ,' 'carry out a purpose or action by means of,' 'make instrumental to an end or process,' 'utilize,' 'expend or consume by putting to use,' 'apply,' and 'any putting to service of a thing.' " Appellant's Br. at 33-34 (citing Webster's Third New Int'l Dictionary 2523-24 (2002)). This dictionary definition underlies UCC's argument that it is entitled to a credit for supplies that it would not have purchased absent any research and for supplies that it would have purchased in any event and that were used to make a product for sale.

We find this argument unpersuasive for two reasons. First, consistent with Judge Learned Hand's observation that "it is one of the surest indexes of a mature and developed jurisprudence not to make a fortress out of the dictionary," *Cabell v. Markham*, 148 F.2d 737, 739 (2d Cir.1945) (Hand, L., J.), *aff'd* 326 U.S. 404, 66 S.Ct. 193, 90 L.Ed. 165 (1945), the dictionary definition of a particular word does not necessarily constitute the beginning and the end of statutory construction. *See, e.g., Mayo Found. for*

*Med. Educ. & Research v. United States*, — U.S. —, 131 S.Ct. 704, 711, 178 L.Ed.2d 588 (2011) (Roberts, C.J.) (holding that the term "student" in a section of the Internal Revenue Code was ambiguous despite the fact that one party cited its dictionary definition); *The Colony, Inc. v. Comm'r of Internal Revenue*, 357 U.S. 28, 32-33, 78 S.Ct. 1033, 2 L.Ed.2d 1119 (1958) (Harlan, J.) (holding that notwithstanding the dictionary definition of the word "omit" in a section of the Internal Revenue Code, "it cannot be said that the language is unambiguous"); *Gayle*, 342 F.3d at 92–93 (Katzmann, J.) (holding that the phrase, "in any court," is ambiguous notwithstanding the "all-encompassing nature of the phrase").

Second, our task "is to determine whether the language at issue has a plain and unambiguous meaning with regard to the particular dispute in the case." *Barnhart v. Sigmon Coal Co., Inc.*, 534 U.S. 438, 450, 122 S.Ct. 941, 151 L.Ed.2d 908 (2002) (quotation marks omitted). While UCC chooses to focus on the word "used" in isolation, we look to the meaning of the phrase as a whole. The critical part of this phrase is "in the conduct of qualified research," which specifies the type of use creditable supply costs may be put towards. At first blush, this suggests that the statute only covers costs for supplies purchased for the purpose of conducting qualified research. Indeed, until we considered UCC's argument, it would not have occurred to us that this credit applies to costs of supplies that UCC would have purchased and used in any event.

Moreover, the phrase, "supplies used in the conduct of qualified research" appears in a statutory section titled, "Credit for increasing research activities," 26 U.S.C. § 41, which would suggest that supplies that

were used in the ordinary process for producing goods for sale are not to be credited. Indeed, as the Tax Court observed, 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." *Union Carbide*, 97 T.C.M. (CCH) at 1273.

We agree with the Tax Court that the costs for which UCC seeks a research credit are "at best, indirect research costs excluded from the definition of [qualified research expenses] under section 1.41-2(b)(2) [of the Treasury Regulations]." *Id.* The Tax Court's reference to the Treasury Regulations is consistent with the principle that "if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute." *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843, 104 S.Ct. 2778, 81 L.Ed.2d 694 (1984). The Treasury Regulations explain section 41(b) by stating that "[e]xpenditures for supplies or for the use of personal property that are indirect research expenditures or general and administrative expenses do not qualify as inhouse research expenses." Treas. Reg. § 1.41-2(b)(1) (as amended in 2004). This regulation, however, does not clearly resolve whether the supplies at issue here

were "used in the conduct of qualified research" because it is not clear how one distinguishes between direct and indirect research expenses.

Nevertheless, the Commissioner argues in his brief that "[s]upply costs are 'indirect research expenditures' if they would have been incurred regardless of any research activities." We ordinarily give deference to an agency's interpretation of its own ambiguous regulations, even if that interpretation appears in a legal brief. *Auer v. Robbins*, 519 U.S. 452, 461-62, 117 S.Ct. 905, 137 L.Ed.2d 79 (1997). The interpretation advanced here does not fall into any of the enunciated categories where we would withhold such deference as it is not "plainly erroneous or inconsistent with the regulation," does not "conflict with prior interpretation" of the same regulation, and is not merely a "convenient litigating position" or a "post hoc rationalization advanced by an agency seeking to defend past agency action against attack." *Christopher v. SmithKline Beecham Corp.*, — U.S. —, 132 S.Ct. 2156, 2166, 183 L.Ed.2d 153 (2012) (internal quotation marks and citation omitted).

On the contrary, the Commissioner's interpretation is entirely consistent with the purpose of the research tax credit, which is to provide a credit for the cost that a taxpayer incurs in conducting qualified research that he would not otherwise incur. Indeed, the House Ways and Means Committee explained that this "substantial tax credit for incremental research and experimentation expenditures will overcome the resistance of many businesses to bear the significant costs of staffing, supplies, and certain computer charges which must be incurred in initiating or expanding research programs." H.R.Rep. No. 97-201, at 111 (1981). The purpose of overcoming "the resist-

ance of many businesses to bear the significant costs of," among other things, "supplies . . . which must be incurred in initiating or expanding research programs" is served by affording the taxpayer the credit for the substantial costs *that it would not otherwise have incurred* to conduct qualified research. Affording a credit for the costs of supplies that the taxpayer would have incurred regardless of any qualified research it was conducting simply creates an unintended windfall. Even if the latter interpretation may be encompassed within the language of section 41(b)(2)(A)(ii), the Commissioner is hardly compelled to adopt the construction that would not necessarily be consistent with the purpose of the credit for increasing research activities. *See Cabell*, 148 F.2d at 739 ("[S]tatutes always have some purpose or object to accomplish, whose sympathetic and imaginative discovery is the surest guide to their meaning.") (Hand, L., J.) (quoted with approval in *Pub. Citizen v. United States Dep't of Justice*, 491 U.S. 440, 455, 109 S.Ct. 2558, 105 L.Ed.2d 377 (1989)).

In sum, as Judge Katzmann has observed, "Agencies are charged with implementing legislation that is often unclear and the product of an often-messy legislative process. Trying to make sense of the statute with the aid of reliable legislative history is rational and prudent." Robert A. Katzmann, Madison Lecture: *Statutes*, 87 N.Y.U. L.Rev. 637, 659 (2012). We are satisfied that in formulating and construing Treasury Regulation § 1.41-2(b)(1), the Commissioner reached a result that is rational, prudent, and consistent with the legislative history and congressional purpose.

## CONCLUSION

The decision of the Tax Court is affirmed with respect to the anticoking and UCAT–J projects. We also affirm the Tax Court's holding that UCC's sodium borohydride project was not qualified research under 26 U.S.C. § 41(d) for the reasons stated in its comprehensive review of the record. *Union Carbide*, 97 T.C.M. (CCH) at 1262.

AFFIRMED.

POOLER, Circuit Judge, concurring:

While I join fully in the majority opinion, I write separately to note my view that Congress may well have intended to give a tax credit for those supplies which would have been purchased absent any qualified research. In reaching this conclusion, I am reminded that Section 41 has long been the subject of much industry lobbying. *See, e.g.*, Mark Crawford, *Industry Lobbies Hard for R & D Tax Credit, Science*, February 19, 1988, at 859; Kim Dixon, *Companies Lobby for U.S. R & D Tax Credit*, Reuters, Oct. 21, 2009 ("Companies with big research and development spending, including CA (CA.O) and Dow Chemical Co (DOW.N), are lobbying U.S. lawmakers to extend and broaden a multibillion-dollar tax credit they say will preserve Americans jobs.").

If Congress intended the supplies at issue here to be creditable, however, it failed to write the statute in such precise terms so as to preclude either the Commissioner's regulations or his interpretations. Accordingly, I join the majority opinion.