

# DEPARTMENT OF THE TREASURY

# INTERNAL REVENUE SERVICE WASHINGTON, D.C. 20224

April 23, 2001

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#### INTERNAL REVENUE SERVICE NATIONAL OFFICE FIELD SERVICE ADVICE

#### MEMORANDUM FOR ASSOCIATE AREA COUNSEL --

FROM: ASSOCIATE CHIEF COUNSEL (PASSTHROUGHS AND

SPECIAL INDUSTRIES) CC:PSI

SUBJECT: RESEARCH CREDIT

This Chief Counsel Advice responds to your memorandum dated January 23, 2001. In accordance with I.R.C. § 6110(k)(3), this Chief Counsel Advice should not be cited as precedent.

# LEGEND

Taxpayer:	EIN:
<u>a</u> :	
a: b: c: d: u: v: w: x:	
<u>c</u> :	
<u>d</u> :	
<u>u</u> :	
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# ISSUE

Whether expenses incurred by Taxpayer for wages paid to employees of Taxpayer's in-house Patent Department constitute "qualified research expenses" under I.R.C. § 41(b).

#### CONCLUSION

Expenses incurred by Taxpayer for wages paid to employees of Taxpayer's in-house Patent Department do not constitute "qualified research expenses" under section 41(b) because such wages are not for services performed by Taxpayer's employees that constitute "qualified services." Specifically, the wages are not for

either: (1) the actual conduct of qualified research under section 41(d); (2) the direct supervision of the actual conduct of qualified research; or (3) the direct support of either the actual conduct of qualified research or the direct supervision of the actual conduct of qualified research.

# <u>FACTS</u>

Taxpayer is a provider of telecommunications products and services. To protect Taxpayer's interests in its intangible property, Taxpayer's Patent Department manages the patent application process. According to Taxpayer, the patent application process begins when an engineer performing research prepares a written disclosure of an idea (which establishes the basis for the patent application to be drafted by the patent attorney) and ends with the granting of a patent by the U.S. Patent Office.

During the  $\underline{a}$  through  $\underline{d}$  taxable years, Taxpayer employed between  $\underline{u}$  to  $\underline{v}$  persons in its Patent Department. Employees of the Patent Department include Patent Attorneys, Patent Agents, Patent Engineers, Patent Illustrators, and Patent Coordinators. All personnel, other than Patent Coordinators, have technical degrees, typically in electrical engineering, physics, or the equivalent. The job titles and/or job descriptions<sup>1</sup> of the various Patent Department employees are summarized as follows:

#### **Patent Attorneys:**

The various job titles of the Patent Attorneys include, from most to least senior:

Group Patent Attorney, Division Patent Attorney, Senior Patent Attorney, Patent Attorney I, Patent Attorney II, Patent Attorney III.

The duties of Senior Patent Attorneys and Patent Attorneys I, II and III generally include:

Preparing and amending U.S. patent applications; preparing and amending U.S. and secondary patent applications; developing an understanding of client technology and eventually developing expertise according to client needs; drafting of and assisting on agreements, infringement or validity studies; developing and maintaining communication with engineers/inventors, and managers, and eventually developing counseling capability.

<sup>&</sup>lt;sup>1</sup> For all Patent Department employees, the extent of involvement in and supervision over the duties described varies depending upon years of experience.

Group Patent Attorneys and Division Patent Attorneys have at least 10 years experience and generally are responsible for the complete docket of patent disclosures, amendments, and intellectual property projects for the assigned business area. They also must be proficient in intellectual property protection, agreements, and infringement studies, counseling in intellectual property matters, supervision, and training of intellectual property practitioners.

# Patent Agent:

The various job titles of the Patent Agents include, from most to least senior:

Patent Agent I, Patent Agent II, and Patent Agent III.

The duties of all Patent Agents generally include:

Preparing and amending U.S. patent applications with some supervision from Patent Attorneys; preparing and amending secondary patent applications; assisting (with Patent Attorney guidance) on infringement and validity studies; developing communication with engineers/inventors and managers; maintaining awareness of relevant technical developments, and continuing to develop an understanding of competitors' as well as clients' products and technology direction.

# <u>Senior Patent Drafter (or, Patent Engineer)</u>:

The job of Senior Patent Drafters is to prepare clear, complete and accurate working plans and detail drawings for use in obtaining patent rights. The duties of Senior Patent Drafters generally include:

Making final drawings from rough or detailed sketches or notes according to specifications. Checking dimensions of parts, materials to be used, relation of one part to another, and relation of parts to entire project. Making adjustments or changes as necessary. Drawing statistical charts as required. Applying mechanical and electrical knowledge, engineering practices, mathematics, and materials to complete drawings. Drafting multi-view assembly and subassembly drawings.

#### **Patent Illustrator:**

The various job titles of the Patent Illustrators include, from most to least senior:

Senior Patent Illustrator, Patent Illustrator I, Patent Illustrator II, and Patent Illustrator III.

The duties of all Patent Illustrators generally include:

Providing high-quality patent application drawings by further defining conceptual designs or rough sketches; determining the layout (3-D perspective and appearance) of inventions to prepare final artwork (e.g., detailed schematics, drawings, illustrations, flow diagrams, etc.); planning and preparing layouts and drawings using computer-aided drafting systems and software; interfacing with patent practitioners and inventors to produce and revise patent filing specifications (specifically, in relevant part, talking with the practitioner and/or inventor to determine the needs and requirements of the drawing assignment, and providing expert advice to the practitioner on the best way to illustrate the invention).

#### **Patent Coordinator:**

Patent Coordinators perform clerical and administrative tasks and their job is to coordinate the patent docketing activities of the Patent Department. The duties of Patent Coordinators generally include:

Ensuring that docketing, foreign filing and annuity payment procedures are followed according to strict statutory requirements; preparing procedural manuals for the office staff requiring investigation and analysis of changes in patent laws affecting office procedures; handling minor problems with disclosure processing, payment of patent awards, department billings and taxes; preparing monthly reports on patent office activities; assigning and monitoring the work of lower level personnel.

For the  $\underline{d}$  taxable year, Taxpayer has claimed  $\underline{z}$  as qualified wages for purposes of section 41(b). In addition, Taxpayer has filed an additional claim for qualified wages for the  $\underline{a}$ ,  $\underline{b}$  and  $\underline{c}$  taxable years in the amounts of  $\underline{w}$ ,  $\underline{x}$  and  $\underline{y}$ , respectively.

# LAW

Section 41 allows taxpayers a credit against tax for increasing research activities. Generally, the credit is an incremental credit equal to the sum of 20 percent of the excess (if any) of the taxpayer's "qualified research expenses" for the taxable year over the base amount, and 20 percent of the taxpayer's basic research payments.

Section 41(b)(1) provides that the term "qualified research expenses" means the sum of the following amounts which are paid or incurred by the taxpayer during the taxable year in carrying on any trade or business of the taxpayer: (A) in-house research expenses, and (B) contract research expenses.

Section 41(b)(2) provides, in relevant part, that in-house research expenses include any wages paid or incurred to an employee for "qualified services" performed by such employee, and any amount paid or incurred for supplies used in the conduct of qualified research.<sup>2</sup>

Section 41(b)(2)(B) provides that qualified services means, for purposes of both in-house and contract expenses, (i) engaging in qualified research, or (ii) engaging in the direct supervision or direct support of research activities which constitute qualified research.

Treas. Reg. § 1.41-2(c)(1) provides that engaging in qualified research for purposes of performing qualified services means the actual conduct of qualified research (as in the case of a scientist conducting laboratory experiments).

Treas. Reg. § 1.41-2(c)(2) provides that direct supervision for purposes of performing qualified services means the immediate supervision (first-line management) of qualified research (as in the case of a research scientist who directly supervises laboratory experiments, but who may not actually perform experiments). Direct supervision does not include supervision by a higher-level manager to whom first-line managers report, even if that manager is a qualified research scientist.

Treas. Reg. § 1.41-2(c)(3) provides that direct support for purposes of performing qualified services means services in the direct support of either (i) persons engaging in actual conduct of qualified research, or (ii) persons who are directly supervising persons engaging in the actual conduct of qualified research. For example, direct support of research includes the 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.

Under Treas. Reg. § 1.41-2(c)(3)(ii), however, 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

<sup>&</sup>lt;sup>2</sup> Under Treas. Reg. § 1.41-2(e)(1), a "contract research expense" is 65 percent of any expense paid or incurred in carrying on a trade or business to any person other than an employee of the taxpayer for the performance on behalf of the taxpayer of (i) qualified research, or (ii) services which, if performed by employees of the taxpayer, would constitute qualified services. Although contract research expenses are not at issue in this case, the rules relative to qualified services as they apply to in-house research expenses likewise apply to contract research expenses.

company officers engaged in supervising financial or personnel matters do not qualify as direct support of research. This is true whether general administrative personnel are part of the research department or in a separate department. Direct support does not include supervision. Indeed, supervisory services constitute qualified services only to the extent provided in Treas. Reg. § 1.41-2(c)(2).

In general, qualified services do not consist of overhead, general or administrative services, or other services that only indirectly support the qualified research. Thus, accounting, budgetary, payroll and legal functions, as well as business supervision and raising capital do not constitute qualified services. <u>See</u> Joint Committee on Taxation, General Explanation of the Economic Recovery Tax Act of 1981, at 127.

Qualification under any of the grounds cited above is contingent upon a determination that the taxpayer is performing qualified research within the meaning of section 41(d)(1). For purposes of the research credit in taxable years 1981 through December 31, 1985, the term "qualified research" had the same meaning as the term "research or experimental" had under section 174, except that the term did not include (1) qualified research conducted outside the United States, (2) qualified research in the social sciences or humanities, and (3) funded research. Under Treas. Reg. § 1.174-2(a)(1), the term "research or experimental expenditures" includes the costs of obtaining a patent, such as attorneys' fees expended in making and perfecting a patent application. However, research or experimental expenditures do not include expenditures for the acquisition of another's patent, model, production or process. Treas. Reg. § 1.174-2(a)(3)(vi).

For taxable years beginning after December 31, 1985, Congress substantially narrowed the definition of qualified research for purposes of the credit computation with the objective of narrowing the scope of the credit to technological advances in products and processes. See S. Rep. No. 99-313, at 694-95 (1986); H.R. Rep. No. 99-426, at 178 (1985). Thus, it was no longer sufficient merely to satisfy the section 174 definition of "research or experimental expenditure" to qualify for the research credit. See Norwest Corporation v. Commissioner, 110 T.C. 454, 492-93 (1998); United Stationers, Inc. v. United States, 982 F. Supp. 1279 (N.D. III. 1997), aff'd, 163 F.3d 440 (7th Cir. 1998). Thus, for taxable years beginning after December 31, 1985, section 41(d)(1) defines the term "qualified research" as research,

- (A) with respect to which expenditures may be treated as expenses under section 174,
- (B) which is undertaken for the purpose of discovering information--
  - (i) which is technological in nature, and

- (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer, and
- (C) substantially all of the activities of which constitute elements of a process of experimentation for a purpose related to a new or improved function, performance, or reliability or quality, and not for a purpose related to style, taste, cosmetic, or seasonal design factors.

Qualified research does not include any activity described in section 41(d)(4).

Section 41(d)(4) excludes several activities from the definition of "qualified research." The exclusion for research after commercial production under section 41(d)(4)(A) provides that the credit shall not be available for any research conducted after the beginning of commercial production of the business component. The business component is defined as any product, process, computer software, technique, formula, or invention held for sale, lease or license, or used by the taxpayer in its trade or business. I.R.C. § 41(d)(2)(B). The legislative history clarifies that no expenses for "post-research activities" relating to a business component are eligible for the credit after the component has been developed to the point where "it either meets the basic functional and economic requirements of the taxpayer for such component or is ready for commercial sale or use." H.R. Conf. Rep. No. 99-841, at II-74 (1986). The credit will be allowed for post-research activities only in the event a "significant improvement" is made to an existing business component such that a new business component is created. See Id., at II-74 n.4.

# **ANALYSIS**

The issue in this request for Field Service Advice is whether wages paid to Taxpayer's employees which are attributable to obtaining U.S. patents are qualified research expenses under section 41(b). To qualify for the credit, such wages must be for services performed by Taxpayer's employees that constitute qualified services within the meaning of section 41(b)(2)(B) and Treas. Reg. § 1.41-2(c). Specifically, Taxpayer must show that the wages paid to its Patent Department employees are for either: (1) the actual conduct of qualified research under section 41(d); (2) the direct supervision of the actual conduct of qualified research; or (3) the direct support of either the actual conduct of qualified research or the direct supervision of the actual conduct of qualified research. Thus, the determination of whether Taxpayer's activities constitute qualified services should be made by reference to the <u>activities</u> of Taxpayer's employees, and not by reference to the job title.

#### **Qualified Research:**

The wages paid to employees of Taxpayer's Patent Department relative to Taxpayer's patent application process are not for the actual conduct of qualified research under section 41(d). While there is no dispute that Taxpayer has satisfied the first requirement for qualified research in that the costs of obtaining patents are research or experimental expenditures under section 174, we cannot agree that Taxpayer has satisfied the remaining requirements under section 41(d) for taxable years after December 31, 1985. To qualify for the credit, the activities undertaken by Taxpayer's Patent Department must be research undertaken for the purpose of discovering information that is technological in nature, the application of which must be intended to be useful in the development of a new or improved business component of the taxpayer. Further, substantially all of the research activities must constitute elements of a process of experimentation and must relate to a new or improved function, performance, reliability or quality, and not to style, taste, cosmetic, or seasonal design factors.

We have reviewed the job descriptions for the various Patent Department employees, and do not believe that any of the activities delineated by the descriptions involve the discovery of technological information the application of which is intended to be useful in the development of a new or improved business component. The Patent Attorneys and Patent Agents generally prepare and amend patent applications. To perform this task, they must develop and maintain a communication link with inventors and engineers. In a memorandum captioned "Response to ENG-44" (hereafter, Response), Taxpayer states that "[i]nteraction with the engineer performing the research is often required which can result in the opportunity for the patent attorney to directly impact the research efforts. For example, the patent attorney may advise an engineer to re-direct his research efforts to prevent infringement on another inventor's previously granted patent." We do not dispute this. Presumably, a Patent Attorney and/or Patent Agent must make a preliminary determination as to whether an idea for a proposed product is patentable to the extent there may be an existing patent. Moreover, the Patent Attorneys and Patent Agents may provide advice to the researchers as to how distinct an invention or product must be. Such activities necessarily presuppose constant interaction between the researchers and the Patent Attorneys and Patent Agents. Such activities, however, do not presuppose the performance of qualified research by either the Patent Attorneys or Patent Agent because there is no discovery of technological information the application of which is intended to be useful in the development of a new or improved business component of Taxpayer. Rather, such activities are limited to determining whether a patent exists with respect to a similar product.

Similarly, the activities of the Senior Patent Drafter, Patent Illustrator, and Patent Coordinator do not qualify under section 41(d)(1)(B). Senior Patent Drafters prepare final drawings of inventions for use in obtaining patent rights. Patent Illustrators generally prepare patent application drawings and also serve as an

intermediary between Patent Attorneys and inventors regarding the requirements of a patent drawing. Patent Coordinators perform tasks relative to the patent docketing activities of the Patent Department. None of these activities constitute qualified research activities. Rather, such activities are focused upon facilitating the acquisition of a patent for a completed product or invention.

In addition, none of the activities of any Patent Department personnel constitute elements of a process of experimentation under section 41(d)(1)(C). The Conference Report describes the term "process of experimentation" as

a process involving the evaluation of more than one alternative designed to achieve a result where the means of achieving that result is uncertain at the outset. This may involve developing one or more hypotheses, testing and analyzing those hypotheses (through, for example, modeling or simulation), and refining or discarding the hypotheses as part of a sequential design process to develop the overall component.

H.R. Conf. Rep. No. 99-841, at II-71 (1986).

None of the activities delineated in Taxpayer's Patent Department job descriptions involve the weighing of alternatives or the development and analysis of hypotheses with respect to the development of the new or improved business component. In fact, from Taxpayer's perspective, the process underlying the activities of the Patent Department should not be theoretical or speculative. Taxpayer relies upon its Patent Attorneys and Patent Agents to provide certain and irrefutable findings regarding the desired patent because Taxpayer's products and resultant patents must be able to withstand legal scrutiny. Similarly, the drawings generated by the Senior Patent Drafter and Patent Illustrator must accurately reflect a completed final product or invention.

Finally, we note that some of the activities of Taxpayer's Patent Department may be disallowed under the exclusion for research after commercial production if such products meet the basic functional and economic requirements of the taxpayer. See section 41(d)(4)(A); H.R. Conf. Rep. No. 99-841, at II-74. It is also arguable that Taxpayer's products are ready for commercial sale or use but for any impediments posed by the absence of the requisite patents.

# **Direct Supervision of Qualified Research:**

The wages paid to employees of Taxpayer's Patent Department relative to Taxpayer's patent application process are not for the direct supervision of the actual conduct of qualified research under section 41(d). Direct supervision for

purposes of performing qualified services means the immediate, day-to-day supervision or first-line management of qualified research.

Unlike the inventor or engineer or manager who directly supervises laboratory experiments performed by Taxpayer's researchers, Taxpayer's Patent Department does not have a supervisory role vis-a-vis Taxpayer's researchers. Even if during the course of daily discussions with the research department a Patent Attorney, for example, provided some guidance as to the direction of a certain product's development because of concerns regarding an existing patent, it is highly unlikely that the Patent Attorney would communicate directly with the researcher, and not through that researcher's own immediate supervisor. Notwithstanding the fact that most Patent Department personnel have technical degrees, it is doubtful that any personnel possess either the technical ability or wherewithal to assume such a supervisory role. Taxpayer has provided no information to suggest that Patent Department employees possessed the requisite scientific capability to supervise directly the Taxpayer's researchers. While Taxpayer has argued that the requisite interaction and interfacing between its inventors and the Patent Department directly impacts the research efforts, this does not constitute the direct supervision of the actual conduct of qualified research.

Thus far, we have concluded that Taxpayer's Patent Department does not engage in the actual conduct of qualified research or the direct supervision of qualified research. Accordingly, the wages of Taxpayer's Patent Department can be taken into account for purposes of computing the research credit only if the activities of the Patent Department are in the direct support of qualified research.

# **Direct Support of Qualified Research:**

The wages paid to employees of Taxpayer's Patent Department relative to Taxpayer's patent application process are not for the direct support of either the actual conduct of qualified research, or the direct supervision of the actual conduct of qualified research. In its Response, Taxpayer correctly notes that activities in direct support of research include typing reports, cleaning equipment, compiling data, and machining parts so that without such activities, the research could not be completed. See Treas. Reg. § 1.41-2(c)(3)(ii). Thus, the failure of a secretary to type a report describing laboratory results derived from qualified research may impede the research, particularly to the extent such report would document the requisite process of experimentation. Similarly, the failure of a clerk to compile research data may delay if not suspend the research.

Conversely, the failure of a Patent Coordinator to prepare a monthly report on Patent Department activities, or to ensure that patent docketing procedures are followed, may impede the operations of the Patent Department but not the progress of Taxpayer's researchers. Similarly, the failure of a Patent Attorney to determine if

the product under development may potentially infringe upon an existing patent will only temporarily curtail product development in the same way the failure of a payroll employee to cut a salary check only may delay the research phase to the extent Taxpayer's overall business activities are affected. In short, the activities of the Patent Department are intended to facilitate, streamline and validate the research efforts and end products of Taxpayer's inventors and engineers. The Patent Department will perform all necessary tasks to achieve this end but such activities alone do not contribute to the efforts underlying the research or support the research.

Under the facts provided, we do not believe that Taxpayer has demonstrated that Patent Department personnel contributed in any germane way to its research efforts. Although Patent Department personnel have technical degrees, Taxpayer does not portray such personnel as scientists or experts who may have been responsible for investigating what research avenues to pursue and that but for their recommendations, the various alternatives and hypotheses could not have been weighed and evaluated. The activities performed by Taxpayer's Patent Department simply involve determining the extent to which completed research can be protected through the satisfaction of certain legal requirements.

# CASE DEVELOPMENT, HAZARDS AND OTHER CONSIDERATIONS

We note that in Response, Taxpayer's counsel states that the "IRS acquiesces on the issue of qualification under Section 174." The use of the word "acquiesce" is curious in view of the fact that the Service will not argue against a regulation that clearly states that the costs of obtaining a patent will qualify under section 174. We cannot, however, "acquiesce" on the issue of whether such costs constitute qualified research costs under section 41. Congress, in narrowing the scope of the credit to technological advances in products and processes, sought to prevent taxpayers from claiming the credit for any expense relating to product development. Thus, the credit is not available for an expenditure merely because the expenditure satisfies the requirements of section 174. See Norwest, 110 T.C. 454, 492-93 (1998). Costs attributable to obtaining a patent are precisely the sort of product development expenses that Congress sought to exclude from the definition of qualified research.

In Response, Taxpayer's counsel notes that in the Conference Report to the 1986 Act, Congress "specifically excludes the costs of acquiring another person's patent from the credit, which implicitly allows the costs of obtaining one's own patent as expenditures that qualify for the credit." H.R. Conf. Rep. No. 99-814, at II-71. This argument is, at best, specious. Not surprisingly, Taxpayer presents this excerpt from the Conference Report out of context. The quoted portion is from a section of the Conference Report where Congress is delineating the threshold section 174 requirements for qualified research. Thus, Congress notes that the credit, like the

section 174 deduction, is not available for costs of acquiring another person's patent. This is precisely the standard found under Treas. Reg. § 1.174-2(a), which contemplates that a taxpayer should not get the deduction for obtaining another taxpayer's already perfected patent, a section 197 intangible subject to 15-year amortization. Thus, there is no inference in the Conference Report that section 41 allows the costs of "obtaining" (that is, making and perfecting) one's own patent.

Finally, we note that in Response, Taxpayer maintains that "[t]here have been cases . . . during the tax years in question where the involvement of the patent attorneys has been so significant that they were required to be listed as one of the inventors on the patent application. This illustrates that some of the expenses in the patent department would even qualify under the stricter test of services directly engaged in research under Section 41(b)(2)(B)(i)." If this is, indeed, the case, then Taxpayer must come forward with evidence showing that the activities of such Patent Attorneys satisfied the substantive requirements for qualified research under section 41(b)(1)(B) and (C). Until Taxpayer makes such a showing, however, we cannot treat the wages incurred as qualified research expenses.

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Please call if you have any further questions.

By: CHRISTINE E. ELLISON

Chief, Branch 7

(Passthroughs and Special Industries)