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INTERNAL REVENUE SERVICE NATIONAL OFFICE FIELD SERVICE ADVICE

MEMORANDUM FOR LMSB DIVISION COUNSEL,

FROM: ASSOCIATE CHIEF COUNSEL (PASSTHROUGHS AND SPECIAL INDUSTRIES) CC:PSI

SUBJECT: RESEARCH AND EXPERIMENTAL EXPENDITURES

This Field Service Advice responds to your memorandum dated December 12, 2000. Field Service Advice is not binding on Examination or Appeals and is not a final case determination. This document is not to be used or cited as precedent.

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LEGEND

Taxpayer:

x:
y:
z:

ISSUE

Whether expenditures incurred by Taxpayer's design and prototype department relating to the design, development, modification, and improvement of athletic footwear constitute "research and experimental expenditures" under I.R.C. § 174.

CONCLUSION

Expenditures incurred by Taxpayer's design and prototype department relating to the design, development, modification, and improvement of athletic footwear constitute "research and experimental expenditures" under section 174 only if such expenditures are attributable to activities intended to eliminate uncertainty concerning the development or improvement of the footwear products and if such expenditures are not otherwise excludable under section 174.

FACTS

Taxpayer is in the trade or business of designing, developing, selling, and distributing athletic footwear products. Taxpayer's design and prototype department (design department) is engaged in all activities related to the design, development, modification, and improvement of Taxpayer's footwear products.

Taxpayer's product development and/or improvement cycle begins with the design phase during which each member of Taxpayer's design department attempts to conceptualize and design either a new footwear product or an improvement to an existing footwear product. Each design department member produces drawings containing ideas or concepts of what product or improvement might appeal to a particular market segment. Because trends in athletic footwear change frequently, Taxpayer is never certain of what might appeal to the current market.

The design department members then draft and evaluate detailed technical "blue print" design drawings of footwear components, including "cut-away" views illustrating how each of the product's components fit together. The design department will discard the majority of drawings while approximately ten percent of the drawings will be redrafted and reevaluated until certain design concepts are

identified as potential designs for the coming year's product line. Design department activities include tasks related to nonfunctional aspects of the product, such as evaluating colors or positioning insignia, or more complex tasks related to functional aspects of the product, such as designing a new footwear component (e.g., a tread pattern or lace hook), or improving the functionality of an existing footwear component (e.g., an improved tread or a more water-resistant boot).[1] Design department activities may also include developing a new footwear product, which would include activities related to both functional and nonfunctional aspects of the product.

As soon as the design department arrives at a tentative agreement on the designs for the coming year's product line, the proposed designs are reviewed and evaluated by Taxpayer's management. For those designs approved by Taxpayer's management, the design department determines the necessary components for manufacturing, as well as the appropriate methods of manufacturing, each product. Upon final approval of the component and/or footwear product design, the design department evaluates the appropriate manufacturing process for that new design. Once these various design elements are finalized and approved, Taxpayer then asks a foreign manufacturer to construct a prototype pairs of the footwear design. Taxpayer does not manufacture either the components used in the construction of the footwear or the footwear itself. As part of the design process, however, the design department frequently constructs a rough prototype of a proposed product or product component while experimenting with different design features. The rough prototypes are constructed from various scrap materials including discarded prototype models and returned merchandise.

When the a prototype pairs of footwear are constructed by the foreign manufacturer, they are returned to Taxpayer where the design department inspects them for inherent design flaws. Such design flaws may be functional (i.e., generally relating to the product's purpose, action or performance) or non-functional (i.e., generally relating to color or style). Once Taxpayer approves the design, the prototypes are marketed to Taxpayer's customers. When and if the prototypes are successfully marketed, Taxpayer submits an order to its foreign manufacturer for further production of the product.

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[1] The term "functional" is defined in Webster's dictionary to mean "of, connected with, or being a function," and "designed or developed chiefly from the point of view of use." Webster's Ninth New Collegiate Dictionary 498 (1985). The functionality of a product or feature is addressed in the First Restatement of Torts which states that a feature is functional if it affects the product's purpose, action or performance. A feature is nonfunctional if it does not have any of these effects. American Law Institute, First Restatement, Torts, § 742. A functional modification, therefore, may entail a technological advancement while a nonfunctional modification may relate to a more pleasing appearance or color.

Taxpayer performs no internal testing to determine how the footwear will hold up to sustained use and instead relies upon the ultimate consumer to test its product. Thus, design flaws that are not identified upon inspection during the design evaluation process become apparent only when the consumer has purchased, used, and returned the product to the store where it was purchased. If a product has a correctable problem, members of the design department evaluate and attempt to eliminate the problem. The design department addresses diverse problems, ranging from the color of the shoe, the placement of the insignia, the overall design of the tread, or the design of the entire footwear product.

Taxpayer has claimed all costs incurred by the design department for the x, y, and z taxable years as research or experimental expenditures under § 174. Taxpayer's accounting for the costs incurred by the design department does not delineate the nature of the costs incurred.

LAW

Prior to 1954, the tax laws authorized no specific treatment for research and experimental expenditures. In order to provide guidance to taxpayers on the proper accounting treatment of research and experimental expenditures, as well as to encourage taxpayers to carry on research and experimentation, Congress enacted section 174, effective for expenses incurred after December 31, 1953.

Section 174 generally provides that research and experimental expenditures paid or incurred during the taxable year in connection with a taxpayer's trade or business may, at the taxpayer's election, be deducted currently rather than capitalized. Section 174(c) generally provides that section 174 will not apply to any expenditure for the acquisition or improvement of land, or for the acquisition or improvement of property to be used in connection with the research or experimentation and of a character which is subject to the allowance for depreciation under section 167.

Treas. Reg. § 1.174-2(a)(1) provides, in relevant part, that the term "research or experimental expenditures" means expenditures incurred in connection with the taxpayer's trade or business which represent research and development costs in the experimental or laboratory sense. The term generally includes all such costs incident to the development or improvement of a product. Further, expenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the appropriate design of the

product. Whether expenditures qualify as research or experimental expenditures depends on the nature of the activity to which the expenditures relate, not the nature of the product or improvement being developed or the level of technological advancement the product or improvement represents.

Treas. Reg. § 1.174-2(a)(2) provides that the term “product” includes any pilot model, process, formula, invention, technique, patent, or similar property, and includes products to be used by the taxpayer in its trade or business as well as products to be held for sale, lease, or license.

Treas. Reg. § 1.174-2(a)(3) provides that the term “research or experimental expenditures” does not include expenditures for--

> (i) The ordinary testing or inspection of materials or products for quality control (quality control testing);
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> (ii) Efficiency surveys;
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> (iii) Management studies;
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> (iv) Consumer surveys;
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> (v) Advertising or promotions;
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> (vi) The acquisition of another's patent, model, production or process; or
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> (vii) Research in connection with literary, historical, or similar projects.

Treas. Reg. § 1.174-2(a)(4) provides that for purposes of Treas. Reg. § 1.174-2(a)(3)(i), testing or inspection to determine whether particular units of materials or products conform to specified parameters is quality control testing. However, quality control testing does not include testing to determine if the design of the product is appropriate.

Treas. Reg. § 1.174-2(b) contains rules relating to certain expenditures with respect to land and other property. Treas. Reg. § 1.174-2(b)(1) provides that expenditures by the taxpayer for the acquisition or improvement of land, or for the acquisition or improvement of property which is subject to an allowance for depreciation under section 167, are not deductible under section 174, irrespective of the fact that the property or improvements may be used by the taxpayer in connection with research or experimentation. However, allowances for depreciation of property are considered as research or experimental expenditures, for purposes of section 174,

to the extent that the property to which the allowances relate is used in connection with research or experimentation. If any part of the cost of acquisition or improvement of depreciable property is attributable to research or experimentation (whether made by the taxpayer or another), see Treas. Reg. § 1.174-2(b)(2), (3), and (4).

Treas. Reg. § 1.174-2(b)(2) provides, in relevant part, that expenditures for research or experimentation which result, as an end product of the research or experimentation, in depreciable property to be used in the taxpayer's trade or business may, subject to the limitations of Treas. Reg. § 1.174-2(b)(4), be allowable as a current expense deduction under section 174(a).

Treas. Reg. § 1.174-2(b)(3) provides, in relevant part, that if expenditures for research or experimentation are incurred in connection with the construction or manufacture of depreciable property by another, they are deductible under section 174(a) only if made upon the taxpayer's order and at his risk. No deduction will be allowed (i) if the taxpayer purchases another's product under a performance guarantee (whether express, implied, or imposed by local law) unless the guarantee is limited, to engineering specifications or otherwise, in such a way that economic utility is not taken into account; or (ii) for any part of the purchase price of a product in regular production. However, see Treas. Reg. § 1.174-2(b)(4).

Treas. Reg. § 1.174-2(b)(4) provides, in relevant part, that the deductions referred to in Treas. Reg. § 1.174-2(b)(2) for expenditures in connection with the acquisition or production of depreciable property to be used in the taxpayer's trade or business are limited to amounts expended for research or experimentation. Thus, amounts expended for research or experimentation do not include the costs of the component materials of the depreciable property, the costs of labor or other elements involved in its construction and installation, or costs attributable to the acquisition or improvement of the property. See Ekman v. Commissioner, 184 F.3d 522 (6th Cir. 1999), aff'g T.C. Memo. 1997-318 (holding that the cost incurred for the purchase of a used car engine is not deductible under section 174 because the engine is of a character subject to an allowance for depreciation).

ANALYSIS

The issue in this request for Field Service Advice is whether expenditures attributable to Taxpayer's design, development, sale, and distribution of athletic footwear are research or experimental expenditures under section 174. The materials accompanying the incoming request do not state whether Taxpayer's accounting for the costs incurred by the design department include expenses attributable to property that is subject to an allowance for depreciation. Inasmuch

as we have been advised that Taxpayer has classified all costs of the design department as section 174 expenses, we believe we should address this issue briefly.

Treas. Reg. § 1.174-2(b)(1) generally provides that expenditures by the taxpayer for the acquisition or improvement of property which is subject to an allowance for depreciation under section 167, are not deductible under section 174, irrespective of the fact that the property or improvements may be used by the taxpayer in connection with research or experimentation. Treas. Reg. § 1.174-2(b)(2) provides, in relevant part, that expenditures for research or experimentation which result, as an end product of the research or experimentation, in depreciable property to be used in the taxpayer's trade or business may, subject to the limitations of Treas. Reg. § 1.174-2(b)(4), be allowable as a current expense deduction under section 174(a).

These rules describe two types of expenses: (1) expenses incurred for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product; and (2) expenses attributable to the component material, labor or other elements involved in the construction and installation of a product. The former type of expense, to the extent it can be traced to activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product, are deductible for purposes of section 174. The latter type of expense, to the extent it represents costs for the construction of a depreciable asset, is not deductible. See Rev. Rul. 73-275, 1973-1 C.B. 134 (holding that costs attributable to the development and design of an automated manufacturing system, as distinguished from costs attributable to the production of the manufacturing system, are deductible under section 174). Therefore, if the facts of this case suggest that the rough prototypes produced by Taxpayer's design department for use in Taxpayer's trade or business are property of a character subject to the allowance for depreciation, then the cost of the component materials to produce these prototypes are not deductible under section 174.

Treas. Reg. § 1.174-2(b)(3) generally provides that if expenditures for research or experimentation are incurred in connection with the construction or manufacture of depreciable property by another, they are deductible under section 174(a) only if made upon the taxpayer's order and at his risk. The materials accompanying the incoming request for Field Service Advice contain no information concerning Taxpayer's contractual arrangement with the foreign manufacturer. If it is determined that the prototypes are depreciable property, however, then the contract(s) should be examined to determine which party bears the risk of loss.

Assuming that some, if not all, of the costs incurred by Taxpayer's design department do not include expenses attributable to property that is subject to an allowance for depreciation, then we must consider other bases for disallowance under section 174. As noted above, neither the Code nor the regulations provide an explicit definition of the term "research or experimental expenditures." Existing case law is likewise unhelpful and generally predates the 1994 amendments to the regulations at Treas. Reg. § 1.174-2. See, e.g., Mayrath v. Commissioner, 41 T.C. 582 (1964), aff'd on other grounds, 357 F.2d 209 (5th Cir. 1966) (holding that the regulatory definition of research or experimental expenditures was reasonable and consistent with Congress' intent to limit deductions to those expenditures of an investigative nature expended in developing the concept of a product); Kollsman Instrument Corp. v. Commissioner, T.C. Memo. 1986-66, aff'd on other grounds, 870 F.2d 89 (2d Cir. 1989) (denying section 174 treatment because the contracts in question did not require the taxpayer to invent, develop the concept of, or design any product); Agro Science Co. v. Commissioner, T.C. Memo. 1989-687, aff'd but opinion withdrawn, 927 F.2d 213 (5th Cir. 1991) (finding that research requires an element of experimentation rather than simply a repetition of what has already been done); Crouch v. Commissioner, T.C. Memo. 1990-309 (finding that the amounts expended by petitioner were paid to research, write, publish and promote an ordinary literary work and thus were not research costs in the experimental or laboratory sense); TSR, Inc. v. Commissioner, 96 T.C. 903 (1991) (examining, for section 44 research credit purposes, such terms as "laboratory" and "experimental" under section 174).

At best, we are able to discern from this line of cases, together with the statute and regulations, that the term "research or experimental" encompasses the notion that scientific research and development includes an attempt to develop or improve a product, or develop or improve upon a technique or procedure. The 1994 amendments support the notion that scientific research is distinguishable from research of other types in that the amendments provide that expenditures represent research and development costs in the experimental or laboratory sense if the expenditures are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a pilot model, process, formula, invention, technique, patent, or similar property. See Treas. Reg. § 1.174-2(a)(2). See also H.R. Rep. No. 83-1337, at 28 (1954); S. Rep. No. 83-1622, at 33 (1954).

In delineating the scope of the term "research or experimental," the 1994 amendments clarify that uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product. Treas. Reg. § 1.174-2(a)(1). However, the term "uncertainty" must be limited to technological or scientific uncertainty in that a taxpayer must be uncertain as to whether it will be able to develop or improve its product in the scientific or laboratory sense. Put differently, the taxpayer must be uncertain as to whether it

will be able to achieve its product development objective through its research activities. Conversely, uncertainty attributable to business or market concerns is not determinative of the existence of research and experimentation for purposes of section 174.

The section 174 regulations provide several exclusions from the definition of research or experimental expenditures. For example, the term does not include expenditures such as those for the ordinary testing or inspection of materials or products for quality control, or those for efficiency surveys, management studies, consumer surveys, advertising, or promotions. Treas. Reg. § 1.174-2(a)(3). Significantly, these exclusions are related to activities that generally occur after the research is completed in that the purpose of such activities is to evaluate and disseminate the results of the research. For example, once a product, such as a shoe, is developed, the existence of this shoe must be promoted and advertised. Advertising in this respect is the publication or announcement to the public of the availability of a new or improved product. The fact that these excluded activities tend to occur after the research is completed is further supported by the clarification in the 1994 amendments to the exclusion for quality control testing. Treas. Reg. § 1.174-2(a)(4) provides that the exclusion for quality control testing does not apply to testing to determine whether the design of the product is appropriate. If a taxpayer finds that the design of its product is inappropriate, then the research is not completed and the taxpayer must resume its research activities.

In reviewing the materials accompanying the request for Field Service Advice, we note that a distinction appears to be drawn between the functional and nonfunctional aspects of the footwear product. Prior to the finalization of the 1994 amendments to the section 174 regulations, this distinction was relevant. The section 174 regulations proposed in 1989 provided six exclusions in addition to the exclusions contained in the 1957 regulations. In relevant part, the 1989 proposed regulations excluded costs incurred in connection with activities not directed at the functional aspects of a product including expenses relating to style, taste, cosmetic, or seasonal design factors. See 1989 Prop. Treas. Reg. § 1.174-2(a)(3)(v). The 1994 amendments, while retaining the exclusions contained in the final 1957 regulations, did not retain the six additional exclusions proposed in 1989. Therefore, expenditures for any of these six activities qualify as research or experimental expenditures if they fall within the general definition of the term "research or experimental expenditure" and are not covered by one of the existing exclusions. See Explanation of Provisions to the 1993 proposed regulations, 58 Fed. Reg. 15820.

In this case, the fact that Taxpayer's activities are with respect to the development or improvement of any nonfunctional aspects of the footwear product is, by itself, not a supportable basis for disallowance under section 174. Rather, the costs incurred must represent research and development costs in the experimental or

laboratory sense and must be attributable to activities intended to eliminate uncertainty concerning the development of the product.

CASE DEVELOPMENT, HAZARDS AND OTHER CONSIDERATIONS

It is our understanding that the Service's position in this case is that the expenditures in question do not represent research and development costs in the experimental or laboratory sense. This position appears to be based, in large part, upon the fact that the activities of the design department are not those typically associated with scientific research and, moreover, appear to be focused entirely upon developing a product that will appeal to a particular market segment. The fact that members of the design department, all of whom are talented artists and not engineers or doctors, simply draw and redraw pictures of the various footwear products clearly implies that nonscientific activities are taking place, and we agree that such costs, on their face, should not qualify under section 174. Unfortunately, Taxpayer's failure to delineate the nature of the costs incurred by the design department prevents the Service from distinguishing between expenses that may be deductible from those expenses that clearly are not deductible.

Under the facts of this case, it appears that some of Taxpayer's costs attributable to the efforts of the design department to design a product or product line, regardless of whether such efforts are with respect to the functional or nonfunctional aspects of the product, may be allowed to the extent that Taxpayer is uncertain as to whether it will be able to achieve its product development objective through its research activities. It is important to remember, however, that the term "research or experimental expenditures" includes all such costs incident to the development or improvement of a product. Thus, notwithstanding the absence of any regulatory distinction between the functional and nonfunctional aspects of a product, we do not believe the Service should allow a deduction for costs attributable to merely aesthetic alterations to a footwear product where such alterations (i) have only an incidental impact upon the development or improvement of such product, and (ii) are intended only to reflect current consumer fads.

Further, we believe there is regulatory support for the disallowance of a portion of Taxpayer's claimed costs as long as Taxpayer can identify specifically all costs incurred by the design department. For example, Taxpayer's expenses attributable to its inspection of the a prototype pairs of footwear for inherent design defects are not deductible if they are incurred to determine if the footwear conforms to the manufacturing parameters described to the foreign manufacturer. In addition, Taxpayer's expenses attributable to the promotion and marketing of its footwear products are not deductible section 174 expenses. See Treas. Reg. § 1.174-2(a)(3). Also, costs attributable to the marketing of the prototypes must be excluded. Id. Further, it is stated in the revenue agent's memorandum accompanying the request for Field Service Advice that the long term goals of

Taxpayer's development department is to "train and improve abilities of staff members." If any claimed expenses are attributable to management studies and efficiency surveys and the like, these also must be excluded from section 174 consideration. Id. Finally, as noted above, costs attributable to the construction of the rough prototypes must be identified and excluded, assuming such prototypes are property of a character subject to the allowance for depreciation. See Treas. Reg. § 1.174-2(b).

As you know, the 1994 amendments to the regulations at Treas. Reg. § 1.174-2 represent a clarification of the definition of research or experimental expenditures adopted in the 1957 final regulations. To the extent the 1994 amendments do not contain the six exclusions that were contained in the 1989 proposed regulations (in relevant part, the exclusion for activities not directed at the functional aspects of a product), they could be considered a liberalization of the definition of research or experimental expenditures. In view of the fact that many taxpayers claim both the section 174 deduction and the section 41 research credit, we are confident that certain costs that may be includable for section 174 purposes will be disallowed under section 41 (e.g., costs attributable to style, taste, cosmetic, or seasonal design factors under section 41(d)(3)(B)). It is important to bear in mind, however, that section 174 is very specific about the sort of expense that does not qualify. For this reason, we hope that the taxpayer in this case can be prevailed upon to specify the nature of the costs for which it is claiming the deduction.

Please call if you have any further questions.

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