

the capability or the method of achieving that result, or the appropriate design of that result, is uncertain as of the beginning of the taxpayer's research activities." Further, the final regulations emphasize that the taxpayer's activities must be directed at resolving uncertainty regarding the taxpayer's development or improvement of a business component, and that the process of experimentation must fundamentally rely on the principles of the physical or biological sciences, engineering, or computer science in attempting to resolve the uncertainty. Although these concepts are stated explicitly in the 1986 legislative history and are implicit in the statute, they may not have been given appropriate or necessary weight in prior proposed or final guidance on the process of experimentation requirement.

The final regulations, therefore, set out what the Treasury Department and the IRS have concluded to be the core elements of a process of experimentation for purposes of the research credit. As noted above and consistent with the statute's wording which requires purposeful activity (*i.e.*, "undertaken for the purpose of discovering information"), a taxpayer is required to identify the uncertainty regarding the development or improvement of a business component that is the object of the taxpayer's research activities. A taxpayer is also required to identify one or more alternatives intended to eliminate that uncertainty. Additionally, a taxpayer is required to identify and to conduct a process of evaluating the alternatives. The final regulations provide that such a process may involve, for example, modeling, simulation, or a systematic trial and error methodology.

The final regulations further provide that a process of experimentation "*must* be an evaluative process and generally *should* be capable of evaluating more than one alternative." (Emphasis added). Although the identification and evaluation of more than a single alternative is not required to satisfy the process of experimentation requirement, the Treasury Department and the IRS believe that a taxpayer's activities, in order to qualify for the research credit, generally should be capable of evaluating more than one alternative and, in any event, must be designed to evaluate the alternative, or alternatives, being considered.

The final regulations state that the mere existence of uncertainty regarding the development or improvement of a business component does not indicate that all of a taxpayer's activities undertaken to achieve that new or

improved business component constitute a process of experimentation, even if the taxpayer, in fact, does achieve the new or improved business component. The Treasury Department and the IRS believe that the inclusion of a separate process of experimentation requirement in the statute makes this proposition clear. However, the Treasury Department and the IRS have included this clarification in the final regulations out of concern that taxpayers have not been giving sufficient weight to the requirement that a taxpayer engage in a process designed to evaluate one or more alternatives to achieve a result where the capability or the method of achieving that result, or the appropriate design of that result, is uncertain as of the beginning of the taxpayer's research activities. In particular, this clarification is intended to indicate that merely demonstrating that uncertainty has been eliminated (*e.g.*, the achievement of the appropriate design of a business component when such design was uncertain as of the beginning of a taxpayer's activities) is insufficient to satisfy the process of experimentation requirement. A taxpayer bears the burden of demonstrating that its research activities additionally satisfy the process of experimentation requirement.

As noted above, all of the facts and circumstances of a taxpayer's research activities are taken into account to determine whether the taxpayer identified uncertainty concerning the development or improvement of a business component, identified one or more alternatives intended to eliminate that uncertainty, and identified and conducted a process of evaluating the alternatives. Although the final regulations set out the core elements of a process of experimentation, how a taxpayer's qualified research activities will reflect these core elements will depend on the facts and circumstances. These core elements will not necessarily occur in a strict, sequential order. A process of experimentation is an evaluative process, and as such, often involves refining throughout much of the process the taxpayer's understanding of the uncertainty the taxpayer is trying to address, modifying the alternatives being evaluated to eliminate that uncertainty, or modifying the process used to evaluate those alternatives.

Accordingly, the final regulations do not provide detailed guidance as to how the regulatory provisions are to be applied to a given factual situation. Rather, the Treasury Department and the IRS have concluded that the application of these provisions will

depend on the specific activities being claimed by a taxpayer as qualified research, the nature of the taxpayer's business and industry, and the uncertainties being addressed by the taxpayer's research activities. The Treasury Department and the IRS believe that additional, industry-specific guidance may be appropriate and request comments on the form of such guidance.

The final regulations do not include the rule contained in the 2001 proposed regulations that a taxpayer's activities do not constitute a process of experimentation where the capability and method of achieving the desired new or improved business component, and the appropriate design of the desired new or improved business component, are readily discernible and applicable as of the beginning of the taxpayer's research activities. A number of commentators expressed concern that this rule was too vague and susceptible to conflicting interpretations. In light of the clarifications made in these final regulations, the Treasury Department and the IRS have concluded that this rule is no longer necessary because such activities do not constitute a process of experimentation under the final regulations.

As noted above, the 2001 proposed regulations do not contain a specific recordkeeping requirement beyond the requirements set out in section 6001 and the regulations thereunder. No change regarding recordkeeping is being made in these final regulations. The clarifications being made to the process of experimentation requirement do not impose any recordkeeping requirement on taxpayers beyond the requirements set out in section 6001 and the regulations thereunder.

Process of Experimentation—Substantially all Requirement

The 2001 proposed regulations retained the rule in TD 8930 that the "substantially all" requirement of section 41(d)(1)(C) is satisfied only if 80 percent or more of the research activities, measured on a cost or other consistently applied reasonable basis (and without regard to § 1.41-2(d)(2)), constitute elements of a process of experimentation for a purpose described in section 41(d)(3). This requirement is applied separately to each business component.

The Treasury Department and the IRS requested comments on the application of the substantially all rule and, in particular, whether research expenses incurred for non-qualified purposes (*i.e.*, relating to style, taste, cosmetic, or seasonal design factors) are includible