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## Prototypes And The Research And Development Tax Credit: Good News for Manufacturers

Including the costs for prototypes in the calculation of the R&D Credit has long been a matter of contention between manufacturers and the Internal Revenue Service (IRS). However, the Courts have recently been ruling in favor of the taxpayer, leading to changes in the regulations by the IRS. This is good news for manufacturers.

### The Basics

The R&D Credit is allowed for Qualified Research, which requires compliance with a four-part test:

#### Qualified research is research...

1. With respect to which expenditures may be **treated as expenses** under IRC 174,
2. Which is undertaken for the purpose of discovering information that is **technological in nature**,
3. In which the application is intended to be useful in the development of a new or **improved business component** (product or process), and
4. Where all of the activities constitute elements of a **process of experimentation**.

#### A process of experimentation requires...

1. Identifying the **uncertainty** regarding the development or improvement of a business component that is the object of the research activities, such as uncertainty concerning the capability or the method of achieving a result, or the appropriate design of that result;
2. Identifying **one or more alternatives** intended to eliminate the uncertainty; and
3. Identifying and conducting a **process of evaluating** the alternatives, such as through modeling,

simulation, or a systematic trial-and-error methodology.

### Costs that qualify for the R&D credit

1. W-2 wages for employees engaged in qualified research activities;
2. Supplies used in the conduct of qualified research;
3. Contracted research expenses (up to 65 percent of such costs).

### Prototypes

So why were prototypes not allowed by the IRS as part of the R&D Credit? Because prototypes are usually sold subsequent to their use in research and development (as is; with more modifications; or parts are returned to inventory), the IRS considers a prototype to be inventory, thus not subject to the R&D Credit. However, as previously stated, Court cases favoring the taxpayer have led to new regulation.

### Prototypes 1.174-2(a)(4) Pilot Model

The term “pilot model” means any representation or model of a product that is to be produced to evaluate and **resolve uncertainty** concerning the product during the development stage or improvement of the product. The term includes a fully-functional representation or model of the product or a component of the product. Therefore, the costs of prototype (pilot model) that qualify as section 174 costs can also be used in calculating the credit. **It is irrelevant whether a resulting prototype is ultimately sold or used in the taxpayer’s trade or business.** Subsequent events cannot reverse entitlement to the section 174 deduction and the section 41 credit.

## Example

U is engaged in the production and sale of custom machines. U contracts to design a machine to the specifications of a particular customer. U has never constructed a machine to these specifications, so there is **uncertainty** regarding the appropriate design, and uncertainty whether the customer's desired features can be designed and integrated into a functioning machine. U incurs \$10,000 of labor and material costs to produce a pilot model that is used to evaluate and **resolve the uncertainty regarding appropriate design**, and \$1,000 in using the model to **resolve the uncertainty regarding desired features**. **Now that the uncertainties have been resolved**, U incurs an additional \$20,000 to produce the finished product for sale to the customer. The \$11,000 incurred to resolve uncertainties are IRC 174 costs and are eligible for the IRC 41 credit. The \$20,000 is not eligible as IRC 174 costs, but it is costs of goods sold.

Not only can manufacturers begin taking qualifying prototype costs into their R&D Credit, but **amended returns** can be filed for any open years that qualified prototype costs were not included in the R&D Credit already claimed.

## So, How Much is The R&D Credit?

The **regular credit is 20 percent** of a taxpayers' excess of Qualified Research Expenditures (QRE) for the taxable year over their **base amount** of the QRE for the credit year. A **reduced credit of 13 percent** of excess QRE is available.

Rather than the regular credit, a taxpayer may elect to use the **Alternative Simplified Credit (ASC)**, which can be elected by a taxpayer to compute the credit. **The credit is usually 6 percent of the current year QRE**. This option would greatly reduce the credit that would otherwise have been calculated under the regular method, but the advantage of this method is that it **does not require substantiation of the fixed-base years' research activities, i.e., it is much simpler**.

## Offset Against AMT

For tax years beginning in 2016, an **Eligible Small Business** can offset newly generated R&D Credits against AMT liability.

An eligible small business is:

- A corporation whose stock is not publicly traded;
- A partnership, or
- A sole proprietorship.

Note: The average gross receipts of which for the three-tax-year period preceding the tax year of the credit cannot exceed \$50 million.

## Payroll Tax Credit Election

The payroll tax credit election is an annual election made by a **Qualified Small Business** to apply the R&D Credit against the employer portion of social security taxes.

## In Summary

The R&D Credit can provide much needed working capital in the form of reduced income taxes. The need to innovate is inherent in manufacturing. Competition requires new products and new processes. As such, manufacturers often do research and development on a regular basis, but the R&D Credit can be overlooked.

Contact John Fontanella, CPS, CCIFP ([jfontanella@bonadio.com](mailto:jfontanella@bonadio.com)) for the professional assistance needed to claim this lucrative tax credit.

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