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Counsel often retain and rely on analysts to value engineering assets. Therefore, counsel should have a basic understanding of the analyst’s valuation approaches, methods, and procedures.

LEGAL COUNSEL (“counsel”) are often involved in the valuation, economic damages, and intercompany transfer price analyses with regard to engineering-related intangible assets. These analyses arise with regard to client sale and license transactions, financings, tax planning and compliance, financial accounting and public disclosure, and tort and breach of contract commercial litigation. Valuation analysts (“analysts”) typically perform these intangible asset valuation, damages, and transfer price analyses. Counsel often retain, rely on, review the work of, present as experts, and examine or cross examine these analysts. Therefore, counsel should be generally familiar with how analysts perform and report these engagements.

This discussion explains many of the common reasons why analysts are asked (usually by counsel) to perform engineering intangible asset valuation, damages, or transfer price analyses; summarizes the generally accepted valuation, damages, and transfer price methods; and lists the common factors to consider in any engineering intangible asset analysis.

This discussion presents the common types of engineering intangible assets. It describes the most common
type of engineering intangible asset: engineering drawings and technical documentation. And, this discussion summarizes the typical components of engineering drawings and other types of engineering intangible assets.

Some counsel include intangible assets the category of technology intangible assets. Some counsel include engineering use license agreements in the category of licenses and permits intangible assets. And, some counsel include the intellectual content component of engineering intangible assets in the intellectual property category. These classifications are primarily a matter of personal preference. However, there are certain elements that distinguish engineering intangible assets from technology intangible assets. And, there are reasons why analysts typically recognize engineering drawings and related intangible assets in a separate intangible asset category.

For purposes of this discussion, the basic science of any project, invention, or design is included in the technology intangible asset. That technology could be in-process research and development (IPR&D), or it could be completed and commercialized research and development. The technology intangible asset usually encompasses a product or process that is not yet commercially feasible. When the product or process becomes commercially feasible, the intangible asset is no longer considered IPR&D. Rather, it is considered a commercially viable product or process technology.

For purposes of this discussion, the engineering intangible asset begins with the design, drawing, or other documentation of how the owner/operator makes the product or operates the process. Of course, there are documentation elements of IPR&D. These documentation elements could include laboratory notebooks, computer software code, preliminary product designs, and process drawings, schematics, and diagrams. Typically, such IPR&D documentation is not included in the engineering intangible asset category. This is because the IPR&D document is not yet ready to be transferred (by sale or license) to a new operator who could immediately manufacture the product or implement the process.

Engineering intangible assets allow for the practical application of technology intangible assets. Engineering intangible assets include the documentation of the technology design or science so that it can be transferred and used by a new owner/operator. The engineering documentation may result in a patent or a trade secret. The patent or the trade secret would be an intellectual property, but one component of such an intellectual property would be the engineering intangible asset.

**REASONS TO ANALYZE ENGINEERING INTANGIBLE ASSETS** • The following are common reasons why counsel may retain or work with analysts to value a client’s engineering drawings, manuals, and related intangible assets:

- Fair value accounting (including the application of acquisition accounting provisions and the asset value impairment testing provisions of generally accepted accounting principles, or GAAP);
- Federal income tax accounting (including the purchase price allocation of a taxable acquisition, the measurement of a charitable contribution deduction, the test for taxpayer solvency, the tax basis of assets contributed to a partnership, the tax basis of assets distributed in a business dissolution, and the gift or estate tax valuation of personally owned product or process drawings);
- State and local property tax (including the valuation of intangible assets that are exempt from the ad valorem property taxation of real estate and tangible personal property);
- Bankruptcy (including the analysis of the debtor solvency, the testing of a creditor’s collateral value, the fairness of a U.S. Bankruptcy Code Section 363 asset sale, the reasonableness of a
plan of reorganization, and the implementation of post-Chapter 11 fresh-start accounting.

The following are common reasons why counsel may retain or work with analysts to perform a damages analysis related to engineering intangible assets:

- Breach of contract damages (including the breach of a contract to develop or commercialize engineering intangible assets and the breach of a confidentiality agreement);
- Tort damages (including the infringement of engineering materials copyrights or trade secrets, interference with a business opportunity, and the eminent domain taking of an entity’s engineering intangible assets in addition to its tangible assets).

The following are common reasons why counsel may retain or work with analysts to perform a transfer price analysis related to engineering intangible assets:

- The Internal Revenue Code Section 482 intercompany transfer of intangible property (including the transfer between two controlled party affiliates of a multinational taxpayer corporation). The transfer could be the inbound license of the use of engineering intangible property developed in a foreign country, or it could be the outbound license of the use of engineering intangible property developed by a domestic controlled entity;
- Arm’s-length license agreement (including the analysis of the fairness of a design and engineering license agreement between two independent arm’s-length parties).

Types of Engineering Intangible Assets

For purposes of this discussion, engineering intangible assets include the following:

- Construction engineering drawings, including architectural designs and drawings, blueprints, and construction specifications that would allow a contractor to build the facility or structure;
- Product engineering documents, including designs, drawings, blueprints, and schematics that would allow production operators to manufacture and assemble a finished product. Product engineering documents could include raw material specifications and quality control criteria and procedures;
- Process engineering documents, including flow diagrams, drawings, and schematics that would allow production operators to initiate a flow of information, materials, fluids, electric current, or any other substance that moves continuously;
- Engineering manuals and procedures, including any written information that documents how a machine, apparatus, product, or process works. Engineering manuals and procedures may be intended for operational purposes, quality control purposes, or repair and maintenance purposes;
- Tooling engineering documents, including the designs and specifications for manufacturing tools, dies, jigs, and fixtures. This intangible asset category may also include sample products or production prototypes.

The common denominator in these categories of engineering intangible assets is that they can be used to assemble a machine, construct a structure, manufacture a product, or operate a process. Engineering intangible assets should be practical, functional, and useful. Such intangible assets should actually function in the real world (that is, they are beyond the experimental, or research and development, stage). They should be capable of being used in a commercially viable application.

Figures 1, 2, and 3 present illustrative examples of typical engineering drawings (in this example, related to an electric generation facility).
Figure 1
Electric Generation Facility
Illustrative Example of a Mechanical Drawing