### ARTICLES

### **Intellectual Property Valuations for Family Law Purposes**

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Part I of this article covers types of IP and IP analyses, royalty rate data, valuation approaches and methods, data gathering, due diligence, financial projections.

Part II will present an IP valuation illustrative example.

Intellectual property is often included in a marital estate. The intellectual property could be owned directly—by inventors, authors, artists, etc. Or, the intellectual property could be owned indirectly—through the ownership of a closely held company or professional practice. This article summarizes what family law counsel (and other interested parties) need to know about the application of the market approach—and particularly the relief from royalty valuation method—to value marital estate intellectual property. In particular, it focuses on the use of license royalty rate databases in the valuation of intellectual property for family law purposes.

The valuation of intellectual property is often an issue in family law matters. It typically relates to the equitable distribution of the assets of the marital estate. It sometimes relates to the analysis of the income available for spousal and child support payments. This is because intellectual property can be commercialized to generate license royalty income.

#### **BACKGROUND**

The subject intellectual property is sometimes owned directly by the marital estate. This occurs when one of the spouses is an inventor, author, artist,

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etc. Alternatively, the subject intellectual property may be owned indirectly by the marital estate. This occurs when the marital estate includes an ownership interest in a closely held company or professional practice that operates the intellectual property. Particularly when such an ownership interest is involved, the intellectual property may be used in the negotiation (or judicial order) of an asset distribution. That is, it is sometimes inefficient to allocate the stock of a closely held company between the divorcing parties. The intellectual property, however, could be transferred between the parties and a longterm use license agreement could be created. The license could provide wealth and income for the outside (nonbusiness owner) spouse. Also, the license could provide access to (and control of) the intellectual property to the insider (business-owner) spouse.

This discussion focuses on what family law counsel (and other interested parties) need to know about one common category of commercial intangible assets: intellectual property. Counsel should be aware that there are generally accepted cost approach, market approach, and income approach methods that may be used to value intellectual property. This article focuses on the application of the market approach. In particular, it focuses on one market approach valuation method—the relief from royalty method. The relief from royalty method is commonly used to value intellectual property within a family law context.

Specifically, this discussion considers the following topics related to the market approach valuation of intellectual property within a family law context:

- The four types of intellectual property
- The three types of intellectual property analyses
- The use of royalty rate data in intellectual property valuation analyses
- The common intellectual property license royalty rate data sources
- The two types of intellectual property license royalty rate data
- The purpose of making royalty rate data normalization adjustments
- The common types of royalty rate data normalization adjustments

- A royalty rate selection analysis illustrative example
- A relief from royalty valuation method illustrative example

Family law counsel may rely on valuation analysts to prepare intellectual property valuations. Also, legal counsel may have to review intellectual property valuations prepared by analysts engaged by other parties to the family law matter. Family law counsel should be prepared to review such intellectual property valuations—to ensure that they provide adequate support for the valuation development and the value conclusion.

#### TYPES OF INTELLECTUAL PROPERTY

Royalty rate data are commonly used in many types of intellectual property analyses. This statement is true with regard to intellectual property valuation, economic damages, and transfer price measurement analyses. Also, this statement is particularly true for intellectual property valuations performed for family law purposes. Accordingly, this discussion explains and illustrates the use of royalty rate data within the context of a family law intellectual property valuation.

For family law—as well as other—purposes, there are four types of intellectual property:

- Patents
- Trademarks
- Copyrights
- Trade secrets

Each of these intellectual property types or categories will be summarized below.

IP can be commercialized.

As will also be discussed below, royalty rate data are typically extracted from arm's-length, third-party commercial license agreements. Family law counsel should be aware that many

arm's-length, third-party intellectual property license agreements encompass the use of both (1) intellectual property and (2) related commercial intangible assets. Therefore, when using royalty rate data for family law (and other) valuation purposes, analysts should consider the bundle of intangible assets that may be included in each license agreement—as well as the bundle of intellectual property legal rights that are included in each license agreement.

### **Patents and Related Intangible Assets**

This category of intellectual property includes the following common types of patents:

- Utility patents
- Design patents
- Plant patents
- Process/method patents

In addition, third-party licenses (and other transfers) of patents often include the following related commercial intangible assets:

- Patent applications
- Technology sharing agreements
- Unpatented proprietary technology
- Regulatory approvals and licenses (e.g., FDA approvals, OSHA approvals)
- Technology development rights
- Engineering drawings and designs
- Schematics and technical documentation

#### **Trademarks and Related Intangible Assets**

This category of intellectual property includes the following:

- Trademarks
- Trade names
- Service marks

- Service names
- Logos
- Trade dress

In addition, third-party licenses (and other transfers) of trademarks often include the following related commercial intangible assets:

- Brand names
- Advertising programs
- Brochures and marketing materials
- Name-related goodwill

### **Copyrights and Related Intangible Assets**

This category of intellectual property includes copyrights related to:

- Literary works
- Musical works
- Dramatic works
- Pantomimes and choreographed works
- Pictorial, graphic, or sculptural works
- Motion pictures and audiovisual works
- Sound recordings
- Architectural works
- Computer software (including both object code and source code)

Third-party licenses (and other transfers) of copyrights may include the following commercial intangible assets:

- Engineering drawings
- Blueprints
- Manuals and procedures
- Training films

### **Trade Secrets and Related Intangible Assets**

This fourth and final category of intellectual property includes the following trade secrets and related documentation:

- Customer information
- Books and records
- Product formulas and recipes
- Procedures and know-how
- Pricing and cost information
- Accounting documentation

To maintain their confidentiality, trade secrets are rarely licensed in third-party license agreements. The sales and other transfers of trade secrets, however, may include the following commercial intangible assets:

- Employee training materials
- Process flow charts
- Facility operation diagrams and schematics
- Financial plans and projections

# TYPES OF INTELLECTUAL PROPERTY ANALYSES

As mentioned above, license agreement royalty rate data are often used in the following types of intellectual property analyses:

- Valuation analyses (prepared for family law and many other purposes)
- Economic damages analyses (typically related to breach of contract disputes and tort litigation)
- Transfer price analyses (including both intercompany transfers and third-party transfers)

Third-party license royalty rate data are often used in intellectual property valuation analyses.

Such license agreement royalty rate data are typically used in the application of the market approach and, in particular, the relief from royalty rate valuation method. These data may be used to estimate a defined value for the marital estate intellectual property. In addition to valuation analyses, such royalty rate data are also used in transactional fairness opinion analyses. Such an independent opinion may be requested by any transactional participant to assess the fairness of the following:

- A proposed intellectual sale transaction price
- A proposed intellectual property license royalty rate
- The terms of a proposed intellectual property exchange or other transfer transaction

In addition to their use in valuation analyses, license agreement royalty rate data are often used in intellectual property lost profits and economic damages analyses. Such empirical data may be used to conclude a reasonable royalty rate damages measure to an aggrieved intellectual property owner/operator. Also, such a reasonable royalty rate may be used for tort damages measurement or for breach of contract damages measurement.

Finally, arm's-length royalty rate data are often used as a component of intellectual property transfer price analyses. For intercompany transfer price measurement purposes, royalty rate data are often used in the comparable uncontrolled transaction (CUT) transfer price measurement method. Such transfer price analyses are typically performed in transactions related to the following:

- International intercompany transfers of intangible property
- Interstate intercompany transfers of intangible property
- Intercompany intellectual property transfers between controlled entities where one of the entities has a noncontrolling ownership interest
- Arm's-length transfers of intellectual property use rights in a third-party license agreement

## USES OF ROYALTY RATE DATA IN INTELLECTUAL PROPERTY ANALYSES

In addition to valuations performed for family law purposes, license royalty rate data are routinely used in intellectual property analyses performed for other purposes, including:

- Transaction analyses related to:
- arm's-length sales of intellectual property,
- arm's-length licenses of intellectual property,
- intercompany transfers of intellectual property within a controlled entity, or
- third-party transfers of intellectual property between a for-profit entity and a not-forprofit entity.
- Financing analyses related to:
- intellectual property sale/licenseback financing collateral valuations or
- debtor in possession or other secured intellectual property financing collateral valuations.
- Fair value accounting analyses related to:
- GAAP acquisition accounting provisions,
- GAAP intangible asset impairment testing provisions, or
- GAAP post-bankruptcy fresh-start accounting provisions.
- Taxation valuation analyses related to:
- taxable acquisition transaction purchase price allocations,
- basis in an intellectual property asset contributed to a corporation or a partnership,
- charitable contribution deduction substantiation,

- gift and estate tax planning, compliance, and controversy
- property tax planning, compliance, and controversy
- intercompany transfer price arm's-length price measurements,
- taxpayer corporation solvency/insolvency analysis related to COD income recognition, or
- the conversion of a C corporation to an S corporation income tax status.
- Forensic analyses related to:
- intellectual property infringement damages,
- intellectual property license breach of contract damages,
- condemnation and eminent domain taking of business enterprise intellectual property, or
- bankruptcy solvency/insolvency analysis of the intellectual property owner/operator.

# GENERALLY ACCEPTED INTELLECTUAL PROPERTY VALUATION APPROACHES AND METHODS

Family law counsel should be aware that there are generally accepted intellectual property valuation approaches and methods. These generally accepted valuation approaches and methods are described in numerous valuation textbooks, are included in valuation professional organization professional standards, are taught in valuation professional organization training and credentialing materials, and are tested on valuation credentialing examinations. A description of each of these approaches and methods is beyond the scope of this article. All of the intellectual property valuation methods are typically grouped into three generally accepted valuation approaches: the market approach, the cost approach, and the income approach.

A listing of the generally accepted intellectual property valuation methods within each approach is presented below:

- Market approach methods
- Relief from royalty method
- Comparable uncontrolled transactions method
- Comparable profit margin method
- Cost approach methods
- Replacement cost new less depreciation method
- Reproduction cost new less depreciation method
- Trended historical cost less depreciation method
- Income approach methods
- Multiperiod excess earnings method
- Capitalized excess earnings method
- Incremental income method
- Differential income method
- Profit split method
- Residual profit split method

## Market Approach Intellectual Property Valuation Considerations

In the application of the market approach valuation methods, selected valuation pricing metrics are typically based on either comparable or guideline:

- licenses of intellectual property,
- sales of intellectual property, or
- companies that use intellectual property.

In the application of the intellectual property market approach, the common valuation variables that analysts select—and the common valuation procedures that analysts perform—include the following:

- Quantitative/qualitative analyses of the subject intellectual property
- Documentation of the guideline license/ sale/company selection criteria
- Application of the guideline license/sale/ company selection process
- Verification of the selected sale or license transactional data
- Quantitative and qualitative analysis of the selected sale or license transaction data
- Selection of the appropriate financial or operational pricing metrics to apply in the valuation analysis
- Selection of the specific pricing multiples to apply to the subject intellectual property
- Application of the selected pricing multiples to the subject intellectual property financial or operational metrics

Some of the individual factors that analysts consider in the application of the market approach valuation methods include the following:

- Comparison of any seasoned guideline intellectual property to a development stage marital estate intellectual property
- Comparison of any development stage guideline intellectual property to a seasoned marital estate intellectual property
- Assessment of the current state of the competition in the intellectual property owner/ operator industry
- Assessment as a part of a comparable profit margin ("CPM") valuation method analysis: is the marital estate intellectual property

the only reason for the difference in profit margins between the intellectual property owner/operator company and the selected CPM companies?

## ELEMENTS OF THE INTELLECTUAL PROPERTY VALUATION ASSIGNMENT

The *first* element in any intellectual property valuation assignment is a complete definition of the subject intellectual property. This statement is true for valuations prepared for any purpose. This statement, however, is particularly true for valuations performed for family law purposes. This is because such valuations are often subject to a contrarian review. The finder of fact in any family law matter will want to know exactly what intellectual property is included in (or excluded from) the valuation.

The intellectual property definition should specify exactly what patent, copyright, trademark, or trade secret is included in the valuation subject. This definition may include the registration number and country for an individual patent, copyright, or trademark (if registered). Also, this definition will typically describe any other commercial intangible assets that are included with the valuation of the marital estate intellectual property.

The *second* element in the intellectual property valuation assignment is a description of the bundle of legal rights included in the analysis. For example, the description of the bundle of intellectual property rights will typically indicate which one of the following bundles is included in the family law valuation:

- Fee simple interest
- Term/reversion interest
- Licensor/licensee interest
- Sublicensee interest
- Territory (domestic/international) interest
- Product line/industry interest
- Life/residual interest
- Use rights

- Development rights
- Commercialization/exploitation rights

*IP* could be transferred between the parties.

The *third* element of the intellectual property valuation assignment typically describes any contract or license terms in effect with regard to the marital estate intellectual property. If the marital estate intellectual property is subject to either an inbound or an outbound license, the analyst will typically summarize the following licensor/licensee responsibilities and license/contract terms:

- Identity of the licensor and the licensee
- Term of the license agreement (including any renewal options)
- The intellectual property legal protection requirements
- The dollar amount and responsibility for research and development expenditures
- The dollar amount and responsibility for marketing, advertising, or other promotional expenditures
- Each party's responsibility to obtain and maintain any licenses, permits, or other regulatory approvals
- Any milestone dates for regulatory approvals, commercialization events, sales levels, etc.
- Any contractual minimum use, production, or sales requirements
- Any contractual minimum marketing, promotion, or commercialization expense requirements
- The responsibility for any research and development technology development payments, development completion payments, etc.
- Each party's responsibility to obtain the required regulatory approvals

- Any milestone license payments made for any reason
- Each party's rights to any future intellectual property developments
- Each party's rights to sublicense the intellectual property

The *fourth* element of the intellectual property valuation assignment is the standard (or definition) of value that the analyst is asked to conclude. For intellectual property valuations performed for various purposes, the following standards of value may apply:

- Fair value
- Fair market value
- Use value
- User value
- Owner value
- Investment value
- Acquisition value
- Collateral value

For valuations performed for family law purposes, the appropriate standard of value is typically determined by statutory authority or administrative rulings. Many jurisdictions apply jurisdiction-specific standards of value for family law purposes, including market value, actual cash value, true cash value, and many others. Most family-law-related standards of value, however, incorporate the concept of an arm's-length transfer between a hypothetical willing buyer and a hypothetical willing seller.

The relief from royalty method is commonly used.

The *fifth* element of the intellectual property valuation assignment is the premise of value that the analyst will apply. Often, for family law valuation purposes, the premise of value is determined by statutory authority or administrative ruling. For

valuations performed for other purposes, the appropriate standard of value may be selected based on the analyst's highest and best use analysis of the subject intellectual property. The common intellectual property premises of value include the following:

- Value in continued use
- Value in place (but not in use)
- Value in exchange—or an orderly disposition basis
- Value in exchange—on a voluntary liquidation basis
- Value in exchange—as an involuntary liquidation basis

### PURPOSE OF THE INTELLECTUAL PROPERTY VALUATION

The purpose of the intellectual property valuation considers the following questions:

- What will the valuation be used for?
- Who will rely on (or receive a copy of) the valuation?
- What form and format of valuation report is required?
- Are there any legal instructions (e.g., specific statutory definitions, judicial precedent, or reporting requirements) that the analyst should consider?

In an intellectual property valuation prepared for family law purposes, the answers to the questions should be agreed to between the analyst and the family law counsel. Particularly for family law purposes, the answers to these questions may come in the form of instructions or directions from the family law counsel.

## INTELLECTUAL PROPERTY VALUATION DATA GATHERING AND DUE DILIGENCE

For family law valuation purposes, the analyst typically gathers and analyzes information related

to the intellectual property owner/operator. Such owner-specific information typically includes the following:

- Owner/operator historical and prospective financial statements
- Owner/operator historical and prospective intellectual property development/maintenance costs
- Owner/operator current and expected resource/capacity constraints

In this stage of the valuation, the analyst will typically document a description and estimate of the intellectual property economic benefits to the owner/operator. Such economic benefits may include the following:

- Any revenue increase associated with the intellectual property (e.g., related product unit price/volume, market size/position)
- Any expense decrease associated with the intellectual property (e.g., expense related to product returns, COGS, SGA, R&D)
- Any investment decrease associated with the intellectual property (e.g., inventory, capital expenditures)
- Any business risk decrease associated with the intellectual property (existence of intellectual property licenses/contracts, decrease of cost of capital components)
- An assessment of the subject intellectual property impact on the owner/operator's strategic position: SWOT (strengths, weaknesses, opportunities, and threats)

The analyst may also consider the intellectual property's market potential outside of the owner/operator. In this assessment of the intellectual property market potential, the analyst may consider the following factors:

 Change in the market definition or in the market size for an alternative (not the current) owner/user

- Change in alternative/competitive uses to an alternative (not the current) owner/user
- The subject intellectual property ability to create inbound/outbound license opportunities to an alternative (not the current) owner/user
- Whether the current owner can (1) operate the subject intellectual property and also (2) outbound license the subject intellectual property (in different products, different markets, different territories, etc.)

## REVIEW OF INTELLECTUAL PROPERTY FINANCIAL PROJECTIONS

As part of the intellectual property valuation, the analyst will often receive financial projections related to the owner/operator business operations. These financial projections may relate to the following levels within the owner/operator business enterprise:

- the total owner/operator company,
- a particular business unit, or
- the subject intellectual property only.

As part of the intellectual property valuation, the analyst may review and challenge:

- any owner/operator-prepared financial projections and
- any owner/operator-prepared measures of intellectual property economic benefits.

In this due diligence of the owner/operatorprepared financial projections, the analyst may perform the following benchmark analyses:

- Compare any prior projections to prior actual results of operations
- Compare any projections to current capacity constraints
- Compare any projections to the current total market size

- Consider published industry average CPM profitability metric data
- Consider guideline publicly traded company CPM profitability metric data
- Consider the quality and quantity of available inbound or outbound license data
- Perform an intellectual property remaining useful life ("RUL") analysis, with consideration of the following:
- Legal/statutory life
- Contract/license life
- Technology obsolescence life
- Economic obsolescence life
- Lives of prior generations of the subject intellectual property
- Position of the subject intellectual property in its life cycle

As part of the due diligence of the owner/operator financial and operational data—and particularly of the owner/operator financial projections—the analyst often considers industry data sources. These industry data sources may be used as benchmarks to test the reasonableness of the projected profit margins and other financial metrics. Some of the common industry data sources that analysts use for such comparative benchmark analyses are listed in *Exhibit 1*.

#### Exhibit 1

Intellectual Property Valuation Common Industry Data Sources Used for Due Diligence Benchmark Analyses

1. Occupational Safety & Health Administration—The U.S. Department of Labor, Occupational Safety & Health Administration website provides Standard Industrial Classification (SIC) codes. Codes can be searched by keyword, or the SIC code "tree" can be viewed and browsed. This resource is available at <a href="https://www.osha.gov/pls/imis/sicsearch.html">https://www.osha.gov/pls/imis/sicsearch.html</a>.

- U.S. Census Bureau—The U.S. Census Bureau North American Industry Classification System (NAICS) website provides a searchable database of NAICS codes. NAICS codes are a more recent classification system than SIC codes. Therefore, they can be better for newer industries, such as some high-tech industries. More information is available at https://www.census.gov/eos/www/ naics/.
- 3. FirstResearch—FirstResearch is an industry research database that was developed to provide information for sales people. It provides an overview, valuation pricing multiples, growth rates, and information on how to analyze a company in a particular industry. Information is updated quarterly. It is available at www.firstresearch.com.
- 4. IBISWorld—IBISWorld is one of the largest independent publishers of U.S. industry research. Research includes information on major companies in the industry, growth rates, key financial data, and outlook for the industries. The research covers approximately 700 different market segments. Some international reports are also available. Information is updated quarterly for most industries and less frequently for other industries. IBISWorld is available at www.ibis world.com and also through other database aggregators.
- 5. S&P Industry Surveys—S&P Industry Surveys are available on approximately 50 industry sectors. The reports provide global industry information as well as information on U.S. industries. Major companies are discussed, and detailed information on the recent past and the outlook for the future are provided. A glossary of specialized terms is provided. Also, comparable financial information on major companies in the industry is provided. The information is updated twice a year. These surveys are available from various sources, including S&P Net Advantage and Alacra.
- ABI/Inform—Articles from U.S. and international general interest and trade publications may be searched. This database is available at most libraries and through database aggregators such as www.alacra.com.

- 7. Bloomberg Industries—This component of the Bloomberg database provides industry data, interactive charting, and written analysis from a team of industry experts. Contact information for each industry expert is provided so that an analyst can follow up with questions if needed. More information is available at <a href="https://www.bloomberg.com/professional/">www.bloomberg.com/professional/</a>.
- 8. MarketResearch.com—This database provides access to industry and market research reports from many different sources. It provides information on products, trends, regions, demographics, industries, and companies from its collection of over 700 research publishers. More information is available at <a href="https://www.marketresearch.com">www.marketresearch.com</a>.
- 9. S&P Capital IQ—This database provides access to analyst research as well as some market research reports. Capital IQ uses S&P industry classifications. These classifications can be helpful in grouping companies in comparable industries. In addition, comparative ratio information is available. More information is available at www.capitaliq.com.
- Thomson ONE/Eikon—This database provides access to analyst research and market research reports. More information is available at www.thomsonreuters.com.
- 11. FactSet—FactSet also provides access to market research reports as well as analyst reports. The FactSet database is available at <a href="https://www.factset.com">https://www.factset.com</a>.
- 12. Westlaw—Articles from U.S. and international general interest and trade publications may be searched. Westlaw also provides access to the Investext analyst research database. More information is available at www. westlaw.com.
- 13. Almanac of Financial Ratios, CCH, Inc.—This resource is available in print and e-book formats. The book includes 50 comparative performance indicators and covers all of North America using NAICS data. The information is calculated and derived from the latest available Internal Revenue

- Service data on nearly 5 million companies. It includes companies in nearly 200 industries. The book is issued annually. More information is available at *www.cch-group.com*.
- 14. Annual Statement Studies: Financial Ratio Benchmarks and eStatement Studies, The Risk Management Association—Both the book and the online database contain financial statement ratios and common size balance sheet and income statement line items, arrayed by asset and sales size. Six different asset and sales size categories are presented. The book and database cover over 700 industries, sorted by NAICS codes. The book is issued annually. More information is available at www.rmahq.org.
- 15. Valuation Handbook: U.S. Industry Cost of Capital, Duff & Phelps—This annual book contains five separate measures of cost of equity, weighted average cost of capital, statistics on sales and profitability, capitalization, beta, equity valuation multiples, enterprise valuation multiples, financial ratios, equity returns, and capital structure. It is organized by SIC code. This book is updated quarterly. More information is available at www.bvresources.com.
- 16. IRS Corporate Ratios, Schonfeld & Associates, Inc.—This book includes 76 financial ratios that are based on the most recently available income statement and balance sheet data compiled by the IRS. The data focuses on the comparison of financial ratios for companies with and without net income. The contrast between profitable and unprofitable companies highlights which ratios are critical in the achievement of financial success. The book is issued annually. More information is available at www.saibooks.com.

In addition to industry data sources, analysts may consider financial and operational data related to guideline public companies that operate in the same industry as the owner/operator. The analyst may use these guideline company data as benchmarks to test the reasonableness of owner/operator-prepared profit margins and other financial metrics. Some of the common guideline company data sources that analysts use for such

comparative benchmark analyses are summarized in *Exhibit 2*.

#### Exhibit 2

Intellectual Property Valuation Common Guideline Company Data Sources Used for Due Diligence Benchmark Analyses

- 1. Bloomberg—Bloomberg is a fully searchable online database that provides financial information on nearly all (over 99 percent of total market capitalization) active and inactive U.S. publicly traded companies and active and inactive international companies. Companies may be searched by industry sectors or by SIC codes. Detailed financial information is available and updated frequently. More information is available at www.bloom berg.com/professional/.
- MergentOnline—MergentOnline is a fully searchable online database that provides financial information on over 15,000 active and inactive U.S. publicly traded companies and approximately 20,000 active and inactive international companies. Companies are listed by SIC codes and by NAICS codes. More information is available at www.mergen tonline.com.
- 3. S&P Capital IQ—S&P Capital IQ contains detailed information on approximately 88,000 publicly traded companies (both domestic and foreign), approximately 45,000 of which are active. The information is derived from documents filed with the Securities and Exchange Commission (SEC) and similar global stock regulators (as well as proprietary research). The database may be searched by SIC code or by Standard & Poor's industry classifications. The information is updated frequently. More information is available at <a href="https://www.capitaliq.com">www.capitaliq.com</a>.
- 4. Thomson ONE/Eikon—Thomson ONE/ Eikon is a fully searchable online database that provides financial information on approximately 77,000 public companies (54,000 of which are active). Companies may be searched by Global Industry Classification

- Standard (GICS) codes or SIC codes. Detailed financial information is available. The information is updated frequently. More information is available at *www.thomson reuters.com*.
- 5. FactSet—FactSet is an online database that can be screened by numerous criteria, including industry; business description; financial data such as revenue, earnings, or assets; geographic location; closing price; and other criteria. The database contains information on over 75,000 companies worldwide. Over 2,000 unique financial data items are provided. More information is available at <a href="https://www.factset.com">https://www.factset.com</a>.

The various industry financial research and guideline publicly traded companies databases may be useful to analysts looking for industry profit margins and other financial metrics. However, for purposes of intellectual property valuations, analysts should be aware that all of these databases have certain strengths and weaknesses. Several of the analytical strengths regarding the use of industry and guideline company research databases are summarized in *Exhibit 3*.

#### Exhibit 3

Intellectual Property Valuation
Industry and Guideline Company Research
Databases
Analytical Strengths

First, these guideline publicly traded company and industry financial research databases are generally organized and searchable by industry classification. This organizational structure allows analysts to identify financial data that may be relevant to the subject intellectual property.

Second, many of these databases have relevant benchmarks and financial data already compiled and presented in a useful format. This format allows analysts to efficiently identify, select, and utilize relevant industry data.

Third, these databases generally present numerous financial benchmarks (gross profit margin, pretax profit margin, liquidity ratios, etc.). The variety of the available data allows analysts to select the financial data that are most relevant to the subject intellectual property valuation.

Fourth, many of these databases allow the analyst to narrow search parameters to identify financial data only from companies of a specific size (based on asset size, revenue size, market capitalization size, etc.). This size feature may be useful to analysts as many financial benchmarks such as profitability may be affected by either economies of scale or diseconomies of scale.

Several of the analytical weaknesses regarding the use of industry and guideline company research databases are summarized in *Exhibit 4*.

#### Exhibit 4

Intellectual Property Valuation
Industry and Guideline Company Research
Databases
Analytical Weaknesses

*First,* the identification of the individual companies that are included in each industry may not be available.

Second, analysts may not have access to the underlying financial data that are used to calculate the industry benchmarks. Also, these data may include outlier observations, adjusted data, or other data anomalies that are not meaningful.

*Third,* some of the companies listed in each industry category may be incorrectly categorized.

*Fourth,* the owner/operator company may not be sufficiently similar to any of the industries that are included in the database.

*Fifth*, there is often a time lag in the aggregation of the data presented in some of these data sources. Therefore, the data presented in the databases may be a few years old.

Analysts should be mindful of both the strengths and weaknesses of using industry and guideline company research databases in the intellectual property valuation.

# THE RELIEF FROM ROYALTY VALUATION METHOD

The relief from royalty (RFR) method is one of the most common market approach methods that analysts use to value intellectual property for family law purposes—and for other purposes as well. The RFR method is based on a foundational assumption. The foundational assumption of this method is that if the owner/operator did not own

its intellectual property, it would have to inbound license that intellectual property from a third-party licensor. An important procedure in the RFR method is the estimate of what amount of a license royalty rate the owner/operator would have to pay to inbound license the subject intellectual property from the third-party licensor.

Of course, the owner/operator actually owns its own intellectual property. So, the owner/operator is "relieved" from having to pay a royalty payment related to such a hypothetical inbound license. Because the owner/operator owns its own intellectual property, it experiences a "relief from royalty." Of course, the analyst has to select a subject-specific royalty rate. That royalty rate is used to quantify the amount of license royalty expense the owner/operator is "relieved" from paying.

In the application of the RFR valuation method, analysts typically have to consider two types of arm's-length license agreement royalty rate data:

- The actual license compensation data (*i.e.*, the raw royalty data)
- Royalty compensation normalization adjustment data

First, analysts select and assess base (or raw) royalty rate data. The base royalty rate is the contractual compensation specified in the selected arm's-length intellectual property license agreement. These base rate data include the "noise" of the actual royalty license consideration arrangements. Second, the royalty adjustment data are the license-specific terms needed to "normalize" the actual CUT royalty arrangements—in order to make these CUT license data more comparable to the hypothetical license of the marital estate intellectual property. So, in order to identify and extract the normalization adjustment data, analysts need to read each of the selected CUT intellectual property license agreements.

# LICENSE-SPECIFIC "NOISE" OFTEN ENCOUNTERED IN CUT DATA

In applying the RFR valuation method, analysts often have to deal with extraneous and unusable transactional data in their search for arm's-length CUT license agreements. These CUT license

agreements are used to extract the market-derived, empirical royalty rate data needed to perform the RFR method valuation analysis. These normalization adjustments typically reduce the "noise" in what appears to be a wide range of aberrational and unrelated intellectual property license royalty rate data.

To maintain confidentiality trade secrets are rarely licensed.

Analysts have to thoroughly review the thirdparty license agreements that are selected for consideration in the RFR valuation method. The purpose of this review is to identify any terms and conditions that may need to be normalized in order to make that CUT license agreement more useful to the RFR valuation analysis. Some of the license agreement normalization adjustments that analysts may look for include the following:

- Upfront fixed payments
- Milestone fixed payments
- Minimum/maximum fixed payments
- Litigation settlements or judicial orders
- Intercompany intellectual property transfers
- Equity transfers as part of the intellectual property license
- Unusually short or long license term periods
- An intellectual property sale transaction that is not a license
- A license royalty rate that is not expressed as a percent of licensee revenue
- A license royalty rate based on licensee sublicense income
- Multiple intellectual property assets included in the single license
- Product sale/distribution agreements

- Treatment of main/complementary products
- Relations of the intellectual property license to supplier, production, or other agreements

### OTHER FACTORS THAT MAY AFFECT INTELLECTUAL PROPERTY LICENSE ROYALTY RATES

In addition to the license-specific "noise" terms that may need to be normalized in the selected CUT agreements, the analyst may consider industry and other general factors that affect intellectual property license royalty rate levels. Analysts should consider these general factors that affect license royalty rates when analyzing the CUT data with respect to the marital estate intellectual property:

- State of the economy—at the CUT license inception date versus at the valuation date
- Size of the owner/operator industry compared to the CUT industry
- Growth of the owner/operator industry compared to the CUT industry
- Profitability of the owner/operator industry compared to the CUT industry
- Market position of the marital estate intellectual property compared to the CUT intellectual property
- Market position of the CUT intellectual property in the CUT industry
- Position in the life cycle of the marital estate intellectual property
- Position in the life cycle of the CUT intellectual property

### THREE PROCEDURES TO MANAGE THE "NOISE" IN ROYALTY RATE DATA

Analysts generally use one of three procedures to manage the "noise" associated with any anomalous royalty rate data found in the CUT license agreements. These three royalty rate "noise" mitigation procedures follow:

- Eliminate the anomalous royalty rate observations from the selected royalty rate data
- Quantitatively adjust for the impact of the normalization factors
- Qualitatively assess the impact of the normalization factors

In addition to these three procedures, analysts may use central tendency analyses that minimize the impact of any anomalous CUT royalty rate observations:

- Median royalty rate calculation
- Trimmed mean royalty rate calculation
- Interquartile range of license royalty rates

In applying the RFR valuation method, it is generally appropriate for analysts to eliminate from consideration those anomalous royalty rate observations that cannot be normalized or adjusted. However, in any intellectual property valuation, it is generally inappropriate for analysts to eliminate from consideration any anomalous royalty rate observations just because they fall outside of the typical range of royalty rate observation (*i.e.*, because the aberrational royalty rates are not "Goldilocks" observations).

#### **ROYALTY RATE DATA SOURCES**

There are numerous commercial data sources that analysts may access to extract arm's-length intellectual property license agreement royalty rate data. Some of the commercial intellectual property license agreement databases are summarized in *Exhibit 5*.

### Exhibit 5

Intellectual Property Valuation Commercial Intellectual Property License Agreement Databases

 ktMINE—ktMINE is an interactive intellectual property database that provides direct access to license royalty rates, actual license

- agreements, and detailed agreement summaries. The subscription-based database contains over 12,000 intellectual property license agreements. License agreements are searchable by industry, keyword, and various other parameters. The full text of each intellectual property license agreement is available. The ktMINE is available at www. bymarketdata.com.
- RoyaltySource—AUS Consultants offers a database that provides intellectual property license transaction royalty rates. This database, which is compiled from SEC filings and other sources, can be searched by industry, technology, and/or keyword. The information provided includes the license royalty rates, name of the licensee and the licensor, a description of the intellectual property licensed (or sold, if applicable), the transaction terms, and the original sources of the information provided. Preliminary results are available online, and a final report is sent to the subscriber via email. A subscription is not necessary. Analysts can pay per search. RoyaltySource is available at www.royalty source.com.
- RoyaltyRange—The RoyaltyRange database consists of manually gathered and analyzed data. RoyaltyRange reports contain more than 50 detailed standardized comparability factors on royalty rates and license terms. Each report is supplemented with original unredacted agreements, as well as filings and other types of documents. The RoyaltyRange database focuses on European transactions, but also contains some U.S. transactions. It excludes agreements between related parties, agreements with undisclosed remuneration mechanisms, royalty-free agreements, agreements where royalties are expressed in other forms than percentage, and agreements with individuals, universities, and other noncommercial entities. The RoyaltyRange database is available at www.royaltyrange.com.
- 4. RoyaltyStat—RoyaltyStat is a subscriptionbased database of intellectual property license royalty rates and license agreements, compiled from SEC documents. It is searchable by SIC code or by full text. The intellectual property transaction database is updated

daily. The full text of each intellectual property license agreement in the database is available. RoyaltyStat is available at www.roy altystat.com.

- 5. IntangibleSpring—IntangibleSpring is a subscription-based database of royalty rates sourced from license agreements filed with the SEC. Using a combination of text mining, natural language processing, and manual review, this database identifies and extracts complete license agreements from filings with the SEC. This database excludes agreements with incomplete pricing data. IntangibleSpring is available at <a href="https://www.intangiblespring.com">www.intangiblespring.com</a>.
- 6. Markables—This database is different from the other databases discussed. Rather than drawing royalty rates from actual transactions of intellectual property, Markables gathers its data from purchase price allocations published in SEC filings. It has over 9,000 trademark valuations published in the financial reports of publicly traded companies from all over the world. Each record contains trademark value, revenues, reported or implied trademark royalty rates, customer value, enterprise value, trademark profit split, and a detailed description of the business as of the date of the valuation. Markables is available at www.markables.net.

The databases listed in *Exhibit 5* are useful to analysts for identifying arm's-length intellectual property license agreement royalty rate data. Analysts should be aware that each of these databases has data reliability strengths and weaknesses. *Exhibit 6* presents some of the analytical strengths with regard to the intellectual property license databases.

#### Exhibit 6

Intellectual Property Valuation Use of Intellectual Property License Databases Analytical Strengths

First, these databases allow analysts to access thousands of license agreements. From these extensive collections of license agreements, analysts may identify license agreements that are relevant to the family law intellectual property valuation.

Second, the extensive database search criteria allow analysts to efficiently identify groups of potential license agreements that may be sufficiently similar to the marital estate intellectual property. Analysts are able to search these databases based on (1) industry (SIC code or other classifications), (2) keyword, (3) time frame, (4) territory (worldwide or specific countries), and (5) a variety of other factors. Analysts may further narrow the search criteria to identify exclusive or nonexclusive licenses. These search criteria allow analysts to identify a sample of potential license agreements through a relatively efficient, documented process.

Third, a strength of most of the above-mentioned databases is that analysts may download the actual license agreements from the database. After selecting a sample of potential license agreements, the analyst should carefully review the actual license agreement in order to select royalty rate data that are sufficiently similar to the marital estate intellectual property.

Analysts should be aware that there are also limitations associated with the use of commercial intellectual license databases. *Exhibit 7* presents some of the analytical weaknesses associated under the intellectual property license databases.

#### Exhibit 7

Intellectual Property Valuation Use of Intellectual Property License Databases Analytical Weaknesses

*First,* there may be numerous duplicate license agreements included in these databases.

*Second,* there may be multiple updates of the same license agreement in the database (*i.e.,* another type of data duplication).

Third, some "license agreements" may actually be asset purchase agreements or other types of transactional agreements. In other words, not every agreement is an intellectual property use license.

*Fourth,* some of the license agreements may be between related parties (and, therefore, may not be arm's-length agreements).

Fifth, some of the license agreements may involve several different types of intellectual property (e.g., a trademark and a patent), making it difficult for the analyst to extract a specific royalty rate for a single intellectual property.

Finally, the royalty consideration formula in the license agreement may be presented in a form that is not particularly useful to the analyst (e.g., a royalty dollar per 1,000 barrels of beer sold rather than a royalty payment as a percent of licensee revenue).

Analysts should consider all of these data reliability strengths and weaknesses when searching intellectual property license databases to extract royalty rates to use in the RFR valuation method.

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