Whittier Law School
Center For Intellectual Property Law
~ and ~
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Are Pleased to Present...
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Intellectual Property Seminar Series

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Increasing Intellectual Property Valuation
A Multifaceted Approach
Who Is Discovision Associates?

Discovision ("DVA") owns and manages a worldwide portfolio of more than 1,300 patents and pending applications in 46 countries. Core technologies relating to optical discs, optical disc players and recorders, minidisc and DVD products. Additional portfolios relating to specific hard drive technology, karaoke, Internet data streaming, and others.

Discovision currently offers a choice of licensing alternatives, one of which does not require royalties to be paid for products manufactured and ultimately consumed in China.
Who Is Discovision Associates?

HISTORY

1965   Founded as Gauss Electrophysics to develop videodisc technology.

1967   Acquired by MCA and later partnered with IBM.

1972   Name changed to MCA Discovision and publicly demonstrates first replicated optical disc

1976   MCA Discovision and Philips cooperate to establish the first worldwide standard for optical videodisc systems.

1978   Discovision begins commercial production of videodiscs and the first mass-produced industrial optical disc player.

Today   Discovision is owned by Pioneer Corporation of Japan, but functions independently as a patent licensing entity.
Who Is Discovision Associates?

- DVA manages and licenses its worldwide portfolio of patents stemming from its original optical disc technology.

- DVA’s patents cover many aspects of optical disc players and recorders, as well as optical disc production. This includes mastering, replication, and even the physical aspects of the disc itself.
Protection Intellectual Property Rights Across the World

- What does this mean?
- Why do it?
- When to use the carrot, stick or audit approach
- Working through barriers attributed to geographical and corporate cultures
- What you need to know before the ink has dried
Royalties from patents have grown from $15 billion to $175 billion (est) between 1990 and 2004.

Pharmaceutical sales have increased 25% per annum to approximately $425 billion between 1999 and 2003.

Consumer electronic market increased 8% to approximately $100 billion in 2004.

Intellectual Property rights are a critical element of these and other industries.
I. Sizing Up Intellectual Property

In this first chapter we will explore what the business professional/intellectual property attorney should do when presented with an existing patent portfolio.

The first thing to do in sizing up a patent portfolio is to find:

- what countries the patents exist in,
- what technological area the patents fall in,
- how many patents there are, and
- what kind of claims do the patents have.
I. Sizing Up Intellectual Property

A) Geographical Area

Geographical area is an important consideration when designing a licensing program. If the patents only exist in some areas and not others, it may be hard to cover either manufacturing areas or major markets.

A patent portfolio that only exists in the U.S. or Europe is less likely to cover the products manufacturing area. This is especially true of lower technology patents.

A patent portfolio that exists only is Asia is very likely to miss major markets for the technology. A well-rounded patent portfolio ideally exists in the major market and manufacturing areas of the patented product.
I. **Sizing Up Intellectual Property**

A) **Geographical Area** (continued)

An example of the countries where Discovision (hereinafter DVA) has currently found it to be cost effective to file in is attached as Exhibit D. Note that Exhibit D has two columns. Depending on the type of invention and scope of claim coverage DVA will either broadly or more narrowly file a patent.

It is the job of the Intellectual Property practitioner/business Intellectual Property manager to anticipate shifts in both product markets and manufacturing facilities to try and obtain the most effective patent protection for his/her company or client.
I. **Sizing Up Intellectual Property**

A) **Geographical Area** (continued)

For example, in the next 20 years Chinese and Indian patents are likely to be increasingly valuable.

Russia, however, will likely have to wait a little longer to become any kind of serious market/manufacturing location.

How to decide where to file patents will be discussed later in Section G.
I.  **Sizing Up Intellectual Property**

B) **Technological Area**

Next, the Intellectual Property practitioner/business manager needs to examine the technological area of the patent and patent applications.

For high technology inventions the market will likely be more limited. Further, with a high technology invention the manufacturing will more than likely be limited to just a few countries.

Knowing this will enable the Intellectual Property practitioner/business manager to more narrowly tailor where patents are applied for, and what patents are kept active.
I. Sizing Up Intellectual Property

B) Technological Area (continued)

Note: It is DVA’s experience that abandoning issued patents produces short-term gain at a cost of long run problems. For low and lower technology patents, a wider patent filing is desirable, since it is relatively harder to tell where the manufacturing will be in the next 20 years.

It is also important to try and determine the market for the technology. A consumer product (such as a cell phone), although a high technology product, would probably warrant the widest possible filing.

A low technology patent to say making film should probably have much more restricted filing.
I. *Sizing Up Intellectual Property*

C) **Number of Patents**

The next thing to consider is the number of patents and patent applications in the portfolio. In general, the more patents, the better. Having more patents impedes a potential infringer's ability to “design out” of your company’s patent portfolio.

Further, it makes it less likely that if your company/client litigates or is litigated against, that your company’s/client’s patents will be found invalid.
I.  **Sizing Up Intellectual Property**

C) **Number of Patents** (continued)

In DVA’s case, DVA went to court on seven optical disc patents. All seven optical disc patents were found valid, but only one was found infringed. Discovision Associates (DVA) vs. DMI (Disc Manufacturing Inc.)

Further, a large number of patents may enable a company to obtain cross licenses under a competitor’s patents and still obtain a royalty from that same competitor.
I. **Sizing Up Intellectual Property**

D) **The Laws of the Countries & Where Patents Reside**

It is important to know or research the laws of the countries the patents exist in. Some countries do not have very developed Intellectual Property legal systems.

For instance, in the Czech Republic and most of Africa, even if a patent is obtained, it may be impossible to enforce.

Further, even if it is enforceable in court, various governmental restrictions may prevent the patent owner from transferring money out of the country.
I. Sizing Up Intellectual Property

D) The Laws of the Countries & Where Patents Reside

Brazil and Indonesia are examples of countries with money flow restrictions.

China, and especially Hong Kong (although improving), are hard to get meaningful judgments out of (see Disney and Microsoft cases).

They are nearly impossible to both enjoin (stop) infringers, and collect internal royalties from (i.e., Hong Kong royalties for Hong Kong production and sales).
I. Sizing Up Intellectual Property

E) Patent Claims

The last and most important thing for the Intellectual Property practitioner to do is look at the patent claims. The patent claims define the scope of what the patent owning company has the right to exclude others from doing.

It will not matter if the specification discloses some great invention that is not claimed or properly claimed. The claim, and the claim alone, is what allows the company to obtain royalties, damages and injunctions.

I have used some expired DVA patents to illustrate some of types of claims you may encounter.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

Looking at Tab 1, we see the U.S. 3,9444,727 patent to Elliott. In column 10, claim 1 we see a claim to a videodisc player’s (read optical disc player) optical beam path. The claim is very broad (Pioneering), is short, and contains only the path, head, and turntable.

Further the claim is to a product likely to be widely available for purchase (more later).
I. **Sizing Up Intellectual Property**

E) **Patent Claims** (continued)

Are there ways to improve this claim? Yes! In my opinion, shorter preambles are better. I would have written:

- “An improved transducer comprising:” instead of

- “In a video playback system including a rotatable turntable adapted to carry a video disc, a player element, a turntable and a video disc carried thereby, an improved transducer system comprising:”.

In the world of patent claims, fewer words are generally (but not always), better. This reworded claim and ones like it are likely to be licensable. This claim, as written, was successfully widely licensed by DVA.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

Tab 2 is the U.S. 4,488,279 patent to Wilkinson. The Wilkinson ‘279 patents show an example of a claim that is relatively long and not likely to be easily purchasable.

Turning to Claim 1, column 10-12, the preamble is short (much better). However, the claim is long, contains a very specific modulator, and is not available to consumers.

This patent is to a mastering machine. Master machines were, and are, very expensive. Further, the mastering machine is likely to be in the control of the party from whom you are seeking royalty.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

In every country except the U.S. you and your company may have no right to ever see the mastering machine.

Therefore, denying infringement, especially if more than one type of master machine exists (and they do), is very easy for the potential licensee.

Despite these limitations, this claim was also widely licensed to manufacturers using DRAW machines.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

Tab 3 shows the U.S. 4,357,533 patent to Winslow. Turning to Claim 1, column 5 bottom and column 6 top, we see:

- a relatively long claim,
- a relatively long preamble,
- very specific parts and placement of parts, and
- a product very likely to be purchasable by the consumer.

The very specific nature of the element, makes it likely that any potential infringer/licensee will attempt to design around.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

Indeed this patent was the way all CD Players worked until the early 1990’s. It was also the way most mastering machines worked until about the same timeframe.

Infringers, licensees, and competitors in fact, designed out of this patent beginning in the early 1990’s. Thus, the danger of narrow claiming and too few patents can easily be seen.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

Tab 4 is the U.S. Patent 4,422,904 to Wilkinson. This patent shows a method claim for a disc metalizer. Turning to claim on column 6, we see a claim with a short preamble and a very short few step claim to metalizing a masterdisc.

This claim suffers from the fact that all information about the process or machine performing the process will be in the hands of your potential licensee.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

Further, only one method claim exists, raising the possibility of invalidity at trial, and the possibility of licensee designing around the patent. Also, no apparatus claim exists, making the possibility of going after the machine manufacture more difficult.

Lastly, metalizers are not widely available to the public.

Again, despite these shortcomings, this patent was widely licensed for some time.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

Tab 5 shows the U.S. 4,466,934 patent to Cane. Turning to Claim 1 column 10, we see a claim to an injection-molding machine.

- The claim is short,
- The preamble is long, and
- This is not a readily available consumer product.
- Further, no method claim exists, making it more difficult to go after the potential buyer/user.
- Again, all evidence of infringement is likely in the exclusive hands of the potential licensee.

Despite the shortcomings this patent was also widely licensed.
I. Sizing Up Intellectual Property

E) Patent Claims (continued)

In sum:

- claims that are short,
- have short preambles,
- are to technology that is widely available to the consumer,
- and have both method and apparatus claims are the most licensable.
I. Sizing Up Intellectual Property

F) Reverse Engineering

The last consideration when sizing up a patent portfolio for licensing is the ease of reverse engineering. It is the duty of the patent owner to prove each element of the claim is infringed.

If a claim to a technology is not easily reverse engineered, then licensing will be more difficult. Very complicated biomedical drug making processes and things contained within an integrated circuit are examples of technology that is more difficult to reverse engineer.

That being said, there are often sources available to find information about things that are hard to engineer. The Internet and conferences are examples of two good sources.
I. *Sizing Up Intellectual Property*

F) **Reverse Engineering** (continued)

In summary, the best licensing potential in a patent portfolio exists when the portfolio:

- is in a widely available consumer area that has coverage of the patented products manufacturing and selling countries,
- has short, broad claims that are easy to reverse engineer.

The U.S. 3,944,727 patent to Elliott (Tab 1) was widely licensed to optical disc players (CD and CD Rom) and had counterparts in 15+ countries, including Europe (Germany, France, Italy, Spain, Netherlands, and the United Kingdom). This patent is an example of a patent meeting most of the above criteria.
I. Sizing Up Intellectual Property

G) Where to File Patents

Where to file patents is a very hard question to answer. To make the best guess, one should look at seven factors.

1. Current size of the market for the product being patented,

2. Potential size of the market of the thing being patented,

3. Where the product is currently being produced/sold, and
I. Sizing Up Intellectual Property

G) Where to File Patents (continued)

4. Where the product is likely to be produced/sold within twenty (20) years.

5. To answer these questions, good market knowledge is necessary.

6. Also, a good sense of the local and global economy is helpful.

7. Lastly, the scope of the claim of the thing to be patented should be considered. Generally, broad scoped claims should be more widely filed than the narrow scoped claims seen in Exhibit D as beneficial versus less beneficial countries.
I. *Sizing Up Intellectual Property*

G) **Where to File Patents**  (continued)

Scoped claims should be more widely filed than the narrow scoped claims seen in Exhibit D as beneficial versus less beneficial countries.

In DVA’s case for its optical disc portfolio, after careful study it was decided the patents would best cover DVA’s need by filing them in the countries listed in Exhibit D, depending on the patent’s claim scope. A sample form that DVA uses as a tool to aid in evaluating patent is attached as Exhibit E.
II. Setting Royalty Rates

Now, turning to contracts, the first thing that needs to be decided is setting royalty rates. To set royalty rates, several factors should be considered.

A. Number of units from which there are to draw royalties

B. The profit margin of the unit which will bear the royalty.

C. The standard royalty rate of the industry to be licensed (if any).

D. The coverage of your company’s/client’s patents to the available products.
II. Setting Royalty Rates

These factors are important to consider, because setting a royalty rate too high will make it difficult if not impossible to obtain licensees without litigation.

Conversely, setting a royalty rate too low deprives your company/client of revenue it may have otherwise obtained. So using these factors, how does one set a royalty rate?

- If there are a large number of units and your company/client has patents covering a large number of the available products, then a small to medium royalty may be obtained (i.e. From 1 to 5%).
II. Setting Royalty Rates

- If there are a small number of units and your company/client has patents covering most of the products being sold, a larger royalty, may be obtained (i.e. From 5 to 10%).

- If you have patents that only cover a fraction of the products being sold, regardless of the number of units being sold, then only a small or fractional royalty may be obtained without litigation. (i.e. from .1 to 1%).
II. Setting Royalty Rates

The other factors to consider in setting a royalty rate: profit margin and standard royalty rate in the industry, require researching the industry that your company/client is seeking to license.

Good places to find some of the required information are:

- the Internet,
- various trade association meetings and publications, and
- people in the licensing industry.

Setting the royalty rate without regard to profit margin or the standard industry royalty rate will most likely lead to no licenses and lots of litigation.
III. Contracts

A. How To Get Paid

Having set a royalty rate, the next thing to consider is what kind of license to offer. There are several types, including:

- Running Royalty,
- Cross-license,
- Step-down for a term of years, and
- Pre-paid/Paid-up licenses.
III. Contracts

A. How To Get Paid

Running Royalty/ Stepdown Running Royalty License

Most licensing-out professionals try and obtain running royalty licenses for their clients. The advantage of the running royalty license is that it will supply a stream of revenue for your company/client for some period of time.

An example of a running royalty contract for all Optical Products is attached as Exhibit A.
III. **Contracts**

A. **How To Get Paid**

**Running Royalty/ Stepdown Running Royalty License**

As the portfolio matures, in recognition of the number of patents dwindling in either geographic scope or number, a step-down agreement fixed for a period of years can be offered. In return for a lesser royalty payment at a specified rate, the licensee agrees that his contract will be uncancellable.

The advantage of this kind of licensing agreement is that the lesser royalty payment is guaranteed to your company/client for a specified number of years. An example of a step-down agreement for Players and Recorders has been attached as Exhibit B.
III. Contracts

A. How To Get Paid

Cross License

A different type of license often used by a licensing professional is a cross license.

A cross license happens when both companies have patents or patent applications towards products they are both producing. The cross license allows both parties to practice the inventions in each other’s patent portfolios.

An example of a royalty bearing cross license can be found in Exhibit A page 21. When possible, you should seek a cross license that bears royalty for your company/client.
III. Contracts

A. How To Get Paid

Prepaid/Paid up License

The last kind of patent license to be discussed is the prepaid or paid-up license.

The prepaid patent license seeks an upfront royalty payment for a fixed term of years. When the term of years has passed, the parties renegotiate based on their respective situations at that time.

A paid-up license seeks a lump sum royalty payment for the life of the patents/or products in question. The amount of royalty necessary to be paid by a licensee to the licensor is usually smaller for a prepaid license.
III. **Contracts**

A. **How To Get Paid**

**Prepaid/ Paid up License** (continued)

DVA, over the years has found it more beneficial to offer running royalty licensees or five year prepaid contracts with renegotiation at the end of the prepaid period.

DVA and its licensees have found prepaid contracts to be inherently less risky to both sides.
III. Contracts

A. How To Get Paid

Prepaid/ Paid up License (continued)

For instance, if a licensee goes out of business, then it will only have paid for a lesser amount for a relatively short period of time.

Conversely, if a licensee becomes far more dominant in an industry than anticipated, the licensor will be able to seek further royalties at the end of the prepayment period. An example of a prepaid contract can be found in Exhibit C.
Lessons Learned & Future Strategy in Drafting Licensing Agreements

- Clearly define terms in agreement
- Develop and discuss expectations before the deal is signed
- Agree on a format of reporting that is detailed enough so that most people understand
- Timetable to discuss issues that may arise after the initial reporting of sales and royalties – *catch the problems early*
B. **Useful Contract Clauses**

When making a patent license, there are several clauses that DVA has found to be useful. These include:

- Assignment,
- Choice of law/forum,
- License scope,
- Termination,
- Grant back, and
- Royalty enforcement.

Using **Exhibit A**, I will briefly highlight each of these areas and comment on their benefits.
III. Contracts

B. Useful Contract Clauses (continued)

Assignment (Page 21 Section 9).

When making a license, it is important to think about what will happen if either party is bought or sold, or decides to shed a major product line or business.

DVA decided it would allow assignment of the license only if the entire company was sold and the purchaser agreed in writing to be bound by the license. Further, the former licensee would not retain a license.

Since every license contract differs a little, DVA felt it did not want multiple contracts that had been negotiated by a single licensee.
III. Contracts

B. Useful Contract Clauses (continued)

Choice of Law/Forum (Page 25 Section 12)

Other important considerations are:

- whose law will apply,
- what forums are allowed, and
- is arbitration available for disputes under the contract.

After careful research, DVA decided to use New York law and Delaware as a forum without arbitration. New York had the most business friendly laws, and Delaware had the business friendly courts with the most knowledgeable judges of patent law.

Arbitration was not allowed because it lacks many of the safeguards of formal court.
III. Contracts

B. Useful Contract Clauses (continued)

License Scope (Page 5 Sections 2.21, 2.22, 2.23).

When granting a license, it is very important that both sides clearly understand

- what patents are licensed, and
- what products are covered.

Through extensive definitions [see pages 1-7], the license granted by DVA to its licensees is clearly described.

It is important to clearly describe what is being granted to the licensee, so that a license does not unintentionally attach to an unintended product.
III. Contracts

B. Useful Contract Clauses  (continued)

Termination  (Page 21-23 Section 10).

It is important that both sides understand what will happen when the license ends.

Further, both sides should know:

- how either side may terminate the license during the life of the agreement, and
- what happens in the event of a breach of the contract by either side.
III. Contracts

B. Useful Contract Clauses (continued)

Grant Back (Page 21 Section 8).

A grant back is a form of a cross license.

It is important for the licensor to decide if it wishes or needs to obtain a license under the licensee’s patents.

In DVA’s case, it was thought that a license under the licensee’s patents would be useful for reverse engineering, and to a potential buyer upon the sale of DVA.
Results Achieved

- Underreporting of royalty payments 95% of the cases seen
- Settlements for clients have exceeded $60 million on one single engagement
- Strong return on investment
- Relationship between licensor and licensee is maintained
- Message to the marketplace
- Shareholder satisfaction
III. **Contracts**

B. **Useful Contract Clauses** (continued)

**Royalty Enforcement** (Page 18-20 Section 6).

Royalty enforcement ensures that the licensor is being properly paid under the contract. All royalty enforcement should include:

- the right for a third party to audit the licensee’s records, and
- penalties for under-payment, failure to keep proper records and failure to allow the audit.

Section 6 lays out how DVA has attempted to achieve proper royalty payment and enforcement. Combined with Section 7 page 20 [interest], DVA has found royalty enforcement to be relatively quick and achievable.
III. **Contracts**

B. **Useful Contract Clauses** (continued)

**Net Selling Price (NSP)** (Pages 6 and 7 Section 2.28).

When taking a per product royalty, it is important to know to what the percentage royalty being charged is being applied.

The royalty can be applied to many different things. Some examples are:

- Retail Price,
- Gross Sales,
- Distributed Price, and
- Net Selling Price.
III. Contracts

B. Useful Contract Clauses (continued)

Note: It is important under U.S. law that the royalty be taken just once in the sales chain, i.e.,

- producer,
- distribution,
- retailer, or
- consumer.

DVA decided to take the royalty from the NSP of each optical product produced. DVA’s NSP definition is extensive. In fairness to DVA’s licensees, most third party fees have been stripped from the NSP, so the licensee only pays royalties on the cost of the product produced. This is relatively typical of most industries’ NSP provisions.
III. **Contracts**

B. **Useful Contract Clauses** (continued)

*Settlement Language* (Page 1 Section 1.1).

If the agreement is a settlement of a dispute(s) between the parties, it is important that the agreement state so.

Stating the agreement is a settlement can confer certain legal benefits to the agreement.
**III. Contracts**

**B. Useful Contract Clauses** (continued)

**Most Favored Licensee (MFL)**

MFL clauses are another common contract clause.

Typically, these clauses are a promise from the licensor to the licensee that one or more terms of the contract will be the same for all licensees or similarly situated licensees.

DVA does currently use MFL clauses.
IV. Pitfalls in Licensing

In this section, I will attempt to explain some of the potential problems that may be encountered as a licensor.

The primary problems a licensor must try to avoid are:

- Anti-trust,
- Unlevel playing fields, and
- A lack of trust by the potential licensee.
IV. Pitfalls in Licensing

Anti-trust

Anti-trust is unlawful anti-competitive behavior, usually affecting the consumer, governed by various federal and state statutes.

To avoid anti-trust conduct, licensors should offer licenses:

- Under any patent or group of patents,
- For any product or products,
- In any country or countries requested by the licensee.
IV. Pitfalls in Licensing

Anti-trust (continued)

By offering a single patent to a single product in a single country, patent pooling charges can be avoided.

**Note:**
The royalty rate for the single patent must be reasonable in light of the royalty rate for all of the patents.
IV. Pitfalls in Licensing

Unlevel Playing Fields

An unlevel playing field happens:

- When some licensees are treated substantially better than other licensees, or

- When some companies are licensed, and a larger number of companies are unlicensed with no prospects of becoming licensed anytime soon.
One of the top two complaints of any licensee is paying royalties when they perceive that others are not paying, or are paying substantially less.

It is very important that a licensor take measures to

- try to license unlicensed companies, and
- insure as uniform of royalty rates as possible.

The licensor should even be willing to litigate where necessary.
IV. Pitfalls in Licensing

Lack of Trust

The single biggest obstacle a licensor can encounter is lack of trust from the potential licensee.

A potential licensee may never like you. However, it is vitally important that they trust you and your word.

Therefore, I would strongly encourage you to be truthful and, where possible, provide the materials you have promised.