Trade Secrets,

“The Invisible IP“

Gil Perlberg
March 9, 2021
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25 years of senior management experience
15 years of IP management experience
Named inventor on 26 US patents
Co-Author of Book - “Provisional Patent Applications: Use and Abuse”

• COO and GM, Hybrid Razor
• CEO & Founder, A Nano Technology Licensing Co., Ceronyx Ltd.
• VP Product Management & Engineering, TraceGuard Inc.
• **VP, Intellectual Property &**
  VP Eng. and R&D at Shellcase, Ltd.
• Director of Eng. and R&D at Micro-Swiss, Kulicke and Soffa Ind. Inc.
What Do I Do?

Strategy
Integrate
Manage
The IP Value Pyramid

- Visionary
- Integrated with Business
- ROI, Profit Center
- Cost Control
- Defensive
- Foundation, Awareness

Edison in the Boardroom: How Leading Companies Realize Value from Their Intellectual Assets, Julie Davis and Suzanne Harrison

Ascending the Intellectual Property Management Pyramid
Harry J. Gwinnell, Katherine S. Boyle
Awareness

Known Knowns

Known Unknowns

Unknown Unknowns
I am an independent consultant, NOT an attorney.
The presentation is for informational purposes only.
It is not legal advice.

It is based on my experiences as a manager and entrepreneur,
as well as on online sources.

An IP consultant or IP manager, does not replace
the patent drafter or IP lawyer.
IP = Enabling The Business

Past

Freedom to Operate

Freedom to Innovate

Future
360° Protection?

Most companies protect against some threats
Protecting Your Valuables
Maximize Your IP Assets

Entrepreneurial Path Roller Coaster

Idea → FFF → Pre-seed → Seed → Early-stage → Growth → Exit

IP → IP → IP

Awareness

Trade Secrets

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Topics

1. Intro
2. Lay of the Land
3. Trade Secrets
4. 1st Line of Defense
5. Trade Secrets & Patents
6. Examples
7. Final Words
IP - 80% of the value of a business

The most valuable, but least understood asset of a successful business.

World Intellectual Property Organization
Do you know that non-visible Trade Secrets account for more than 75% of your IP portfolio value?

What do you focus your IP budget on?

* Not including copyrights or trademarks

**A report by Forrester Consulting
In 2013 The Commission on the Theft of American Intellectual Property estimated that trade secret thefts equate to 1% - 3% of US GDP per year.

Study on the Scale and Impact of Industrial Espionage and Theft of Trade Secrets through Cyber PWC, 2020

Trade Secret protection is intertwined with cyber and espionage issues.
Trade Secret Issues vs Company Size

NOT one size fits all

Processes and procedures
- IT department
- Compliance & regulations
  - Data governance

Sporadic services

Further differences due to
- Industry
- Local Laws

Continuous management,
monitoring & updates

• Consultant?
• 3rd party?

Trade secret owner or receiver?

Startup | SME | Large | Corporate
---------|------|-------|----------
Sporadic services | | Continuous management, monitoring & updates |
80% of trade secret loss is from: employees, contractors, trusted insiders

Protection & Prevention,

Awareness
A Cautionary Tale

• SME with unique technology

• VP R&D resigned – opened a competing business

• SME Owner – **trade secret theft!**

• Court - ?
If it isn't protected as a trade secret, the courts will not recognize it as one.
Goals

To **protect & leverage**
our competitive edge

To have **legal** standing
Times are Changing

• Historically, trade secrets did not get much attention

• Trade secret laws

  Defend Trade Secrets Act in 2016

  EU Trade Secrets Directive
Trade Secret Cases, 2009 to 2018

Lex Machina, Trade Secret Litigation Report 2018
What is a “Trade Secret”

Legal definition

A trade secret is **information** that is

- **Secret** - is not *generally* known to the public;
- **Value** - confers economic benefit on its holder *because* the information is not publicly known; and
- **Protected** - where the holder makes *reasonable* efforts to maintain its secrecy.

Business interpretation

A trade secret is knowhow that you would not want your competitor to have.

**Ambiguity**
Definition of secrecy - is not *generally* known to the public.

Consider a
- hypothetical industry of 50 companies producing specialty metal tubing
- one of them develops a “trick” for increasing productivity by 10%
  It’s a trade secret
- sometime later, 4 other companies, independently find the same “trick”
- now 5 companies of 50 “own” the secret

Is it still a secret?
When does it stop becoming a secret?
When does it become “generally known”?

*Secrets by James Pooley*
Reverse engineering is legal.

Not a trade secret misappropriation
a product that was bought and taken apart without extraordinary effort -- "quickly reverse engineerable."

Trade secret misappropriation
Reverse engineering conducted through improper means
• product was stolen
• obtained through deception
• with knowledge of current or past employees

Example
E. I. du Pont deNemours & Co. v. Christopher
Was aerial photography, from whatever altitude, an improper method of discovering trade secrets exposed during construction of a company's plant?
A recipe includes 3 components

1. A list of **ingredients**
2. The **quantities** required of each ingredient
3. **Preparation** instructions

Note that the three are significantly different with respect to confidentiality.

Can an expert chef “reverse engineer” the list of ingredients in your dish?

Can she estimate the amounts of each ingredient?

*Does she know your recipe?*

Can the preparation instructions be reverse engineered?
A Recipe = Secret Sauce

A recipe can be any “secret sauce” a company has, including:

• how to manufacture a widget
• how to assemble complex machinery
• how to provide service
• how to manage an office
• how to identify sales opportunities
• how to use financial instruments
Reasonable Measures For Protecting Trade Secrets

WHAT ARE REASONABLE MEASURES? There are no bright-line rules

1. **Little** or no protections are—not surprisingly—*insufficient*
2. Protective steps **beyond normal** business practices may be required
3. A confidentiality agreement helps but may not suffice.
4. Failing to limit access for **departing employees** may be deemed unreasonable
5. The **recipient** of trade secrets must **understand** their confidential nature
6. One size does not fit all

**CONCLUSION**
The data shows that many **trade secret cases were won or lost long before even being filed based on what the victim-company did (or did not do) long before the theft occurred.**

Winston & Strawn LLP
Feb 27, 2019
Trade secrets consist of information, of knowhow, including:

- Formulas
- Designs
- Programs
- Methods
- Process
- Business plans
- Development plans
- Marketing analysis
- Product costs and pricing
- Supplier information
- Pre-patented innovations

- Negative knowhow
- Data, *the new oil*
- Big-data

Only trade secrets can protect.
Trade Secrets Time Domain

Trade Secret Awareness is a Constant
Facebook and ZeniMax settle legal battle over Oculus VR and stolen secrets

By Chris Walsh | @chriswalsh | Dec 12, 2018, 3:25pm EST

ZeniMax Media and Facebook today settled a long-running legal dispute over the creation of the Oculus Rift VR headset, which ZeniMax claimed was the result of stolen trade secrets (including code and research) shared by ex-ZeniMax employees who had been hired by Oculus.

A Texas federal jury ruled in the company’s favor last year. Facebook was initially ordered to pay $500 million, ...
Listerine - the inventor licensed the secret formula to Lambert Pharmaceuticals. Lambert (now Pfizer) made royalty payments to the inventor’s family for over 70 years…
A trade secret is an asset, it is also a liability

- Inbound – data “mixture”, data contamination
- Duty to protect others confidential information and trade secrets.
Information Hierarchy

Knowhow – travels with employees, public

Confidential - marked

Trade Secrets - commercially valuable because of secrecy

Patentable - technical

Maximize Your IP Assets
# Metadata

Metadata - information about information

<table>
<thead>
<tr>
<th>TS nickname</th>
<th>TS Location</th>
<th>Legal owner</th>
<th>Responsibility of</th>
<th>Secret (1-10)</th>
<th>Value (1-10)</th>
<th>Protection (1-10)</th>
<th>Resources that have accesses</th>
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</thead>
</table>

**Generic Metadata**

<table>
<thead>
<tr>
<th>Type of protection</th>
<th>Shared with 3rd party</th>
<th>Cost</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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**Sharing without sharing**
An Elusive Asset

A trade secret continues indefinitely as long as the secret is not revealed to the public.

It is valueless if disclosed *. 

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A trade secret has been misappropriated

1. has not been publicly disclosed and or put into practice
   - Assess loss of value and increase of risk.
   - Can be fixed

2. has been publicly disclosed and or has been put into practice
Risks

80% of trade secret loss is from trusted insiders, e.g. employees & contractors

❖ Intentional (malicious)
❖ Inevitable (required)
❖ Ignorance & accidental
Effective Protection

MULTI-DISCIPLINARY APPROACH

Management & Policy

Legal

Cyber Security

Training

Change Management

Integration
Why do we Need to Understand the NDA

The NDA is a legal contract between parties sharing information, where the subject of the Non-Disclosure Agreement is a promise, that the information shared will be kept in confidentiality.

The NDA is “present” in most business relationships.

For example, an “NDA relationships map” of a SME manager.
Sharing Confidential Information

2 Steps for Sharing Confidential Information, as Safe as Possible

1. Sign an NDA that is relevant to the information you will be sharing

2. Consider your business objectives for sharing information

And then

• Share only what must be shared

• Share only when it must be shared

• Document what was shared
The NDA Dilemma

**It is a must** – businesses rely on confidentiality agreements to protect their confidential information. Legal intervention, the courts start with a review the NDA. **If there is no NDA there is no case.**

**On the other hand**
- NDAs can be invalidated, for a host of reasons (that will be further discussed).
- It is sometimes hard to prove that information was misappropriated.
- Legal proceeding are expensive and time consuming.
- The outcome of a lawsuit, is never clear. Even if it is in your favor.

Most important – the misappropriated information cannot be reclaimed.

In conclusion

**An NDA is a must,**

**but it must not be the sole protection.**
NDA “Time Domain”

NDA’s have a clause(s) that define durations: Term, Termination and Survivable, etc.

Retroactive 1 year

1 year Disclosure period

5 years Confidentiality period

Indefinitely

t=0

TS Confidentiality period
Common NDA Pitfalls

- Overreaching - overly broad definition of confidential information
- Parties - party signing the NDA is not the party providing / receiving the confidential information
- Signing Authority – the NDA is signed by a person without signature authority
- 3rd party – information is disclosed by a party not signed on the NDA
- Typos - misspelling of names, address or dates
- Public – the information is or has become public
- Early disclosure – information was disclosed prior to the signing of the NDA
- Jurisdiction – poor choice of jurisdiction.
Will Your Information be Protected?

... the Recipient’s Duty (or Obligation) with respect to the Confidential Information that is shared.

A Recipient will use the same degree of care, but no less than a reasonable degree of care, as the Recipient uses with respect to its own similar information to protect the Confidential Information.
Who are You Sharing Your Confidential Information With?

An NDA typically starts by listing the parties involved. For example

- “Disclosing Party” - means the Party furnishing Confidential Information.
- “Recipient” - means the Party receiving Confidential Information.
- “Representatives” - means the officers, directors, employees, partners, members, managers, agents, advisors, subsidiaries, affiliates or representatives of a Party.

Inquire

- Who are the Representatives and why they are required on the NDA.
- Does the signee have the authority to sign on behalf of the parties.
IT Basics

Personal

• Multi-factor authentication
• Password vault
• Validate “unusual emails” before opening

Company

• Asset management
• Secure configuration - ’secure out of the box’ is not always so
• Access management
• Update on a regular basis
• Don’t share confidential information over email
Topics

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# Protecting Ideas

<table>
<thead>
<tr>
<th></th>
<th>Patent</th>
<th>Trade Secret</th>
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<tbody>
<tr>
<td>Subject matter</td>
<td>Technical New &amp; non-obvious..</td>
<td>Business and technical</td>
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<tr>
<td>Registration</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Cost</td>
<td>$20,000 - $100,000</td>
<td>No fees</td>
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<tr>
<td>Duration</td>
<td>20 years</td>
<td>Indefinite (if kept a secret)</td>
</tr>
<tr>
<td>Region</td>
<td>Specific countries</td>
<td>Everywhere</td>
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<tr>
<td>Disclosure of details</td>
<td>Public disclosure</td>
<td>Secret</td>
</tr>
<tr>
<td>Visibility</td>
<td>Public records</td>
<td>Secret</td>
</tr>
</tbody>
</table>
Maximize Your IP Assets Portfolio Clarity

Patent portfolio

Trade secret portfolio

Scope

t1 t2 t3
Formula Patent Doesn’t Destroy Trade Secret Status
by Adam Philipp | Dec 11, 2019 | Intellectual Property, Patent

Formula patent
Doesn’t destroy trade secret
Rules Court of Appeal

The California Court of Appeal has held that disclosing a formula in a patent doesn’t destroy the formula’s trade secret status as long as the patent doesn’t disclose the process for how the trade secret is applied.

Global Protein Products is a coating company that claims as a trade secret a formula and process for treating iceberg lettuce to prolong its shelf life.

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Coca-Cola formula

... according to an affidavit given by a senior vice-president and general counsel for Coca-Cola in a court case...

The written version of the secret formula is kept in a security vault at the Trust Company Bank in Atlanta, and that vault can only be opened by a resolution from the Company's Board of Directors.

It is the Company's policy that only two persons in the Company shall know the formula at any one time, and that only those persons may oversee the actual preparation.

The Company refuses to allow the identity of those persons to be disclosed or to allow those persons to fly on the same airplane at the same time.

The same precautions are taken regarding the secret formulae of the company's other cola drinks- diet Coke, caffeine-free diet Coke, TAB, caffeine-free TAB and caffeine-free Coca-Cola.
Pelican Bay Forest Prods., Inc. v. Western Timber Prods.,

Pelican Bay Forest Products, Inc., a lumber company, sued a competitor, Western Timber Products, Inc., for misappropriating trade secrets.

A Pelican Bay long-term employee gave a portion of his Pelican Bay customer list, along with other information about those customers and their business with Pelican Bay to his son-in-law. The son in-law began working for Western Timber and used the customer information in his new job.

Western Timber argued that the customer list could not be a trade secret because the information resided in the employee’s head.

The court rejected the competitor’s argument that information taken by memory cannot, constitute a trade secret.

Misappropriation of trade secret information, even from memory, can constitute misappropriation under the Uniform Trade Secrets Act.
Extraterritorial Application of the DTSA

Motorola Solutions, Inc. v. Hytera Communications Corp. Ltd.

Motorola claimed that Hytera hired three engineers away from Motorola’s Malaysian office, and that those engineers stole thousands of technical, confidential Motorola documents containing trade secrets and source code.

The key actions that enabled Hytera’s acquisition of Motorola’s trade secrets took place overseas.

Although there is a general presumption that U.S. laws only apply domestically, the district court held that the DTSA overcomes this presumption and applies extraterritorially.

A trade secret owner may be able to sue an alleged misappropriator for trade secret misappropriation that occurred entirely overseas, as long as the owner can show that an “act in furtherance of” such misappropriation occurred in the United States.
Tesla has accused an engineer of downloading about 26,000 sensitive files in his first week.

Kevin Shalvey
Jan 23, 2021, 3:25 PM

• Tesla on Friday filed a complaint accusing an engineer of stealing trade secrets.
• Tesla said engineer Alex Khatilov was hired on December 28 and began transferring files within days.
• Alex Khatilov denies the accusations, according to reports.

Frank Winne & Son, Inc. v. Palmer (1991)

Winne sued Palmer for trade secret theft after learning that Palmer was using trade secrets that had been recovered by a dumpster diver from Winne’s trash.

Palmer sought to throw out the case on the theory that Winne had failed to protect its trade secrets, and the court seemed inclined to do so, responding with two questions.

Was the dumpster in an area exclusively under plaintiff Winne’s control, or was the dumpster accessible to others?
And were Winne’s documents shredded?

It’s clear from the way the court asked the questions that if the dumpster was accessible to others and the documents were not shredded, it was goodbye trade secrets.

In many states, trash on a curb is free for all.

Episode 6: IP Protection and Dumpster Diving, 2020 Appelfeld & Co
Beware of Emails

Emails have a life of their own.
They are not predictable.

• Can be mistakenly sent to wrong addressee – company wide distribution
• Can be resent by recipient – reply all
• Forwarded intentionally, easily

*Not a secure form of sharing confidential information*
Thank You