

Taiwan Under Siege: the Intellectual Property Wars of the 21st Century

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Taiwan Under Siege

- Do not forget Chinese history – The “Opium Wars” of the 19th Century --
 - Humiliating Chinese defeats against West in 1842 & 1860.
 - Began process leading to “unequal treaties” or “extraterritoriality”.
 - Underlying factor – western technological superiority.
 - Led to the publication of the *Illustrated Gazetteer of Maritime Countries* by Wei Yuan, theme: China in danger of succumbing to the technological superiority of the West.
 - ◆ Led to first drive for modernization/”self-strengthening” movement (1874-95).

Taiwan Under Siege

- **Boxer Movement of 1899 – 1901 (an extension of the Opium Wars).**
 - Another humiliating defeat.
 - Resulted in the Boxer Protocol
 - China was fined equivalent of US\$333,000,000.00 (not including interest) (450,000,000 silver taels – but actually paid out 668,661,220 taels) paid out over period 1901 – 1939! Selected percentage of payments received:
 - ◆ Great Britain = 11.25% ,Japan = 7.7%, U.S. = 7.0%
 - US and British payments went, in part, to the establishment of Ching Hua University.

Taiwan Under Siege

- **Once again, Taiwan is under siege -- as significant as the Opium Wars:**
 - A new version of economic imperialism.
 - Use of courts as the battlefields; infringement actions as the battle tactics.
 - Principle litigation focus is on patent infringement.
 - Electronics sector is most immediately and significantly affected.
 - Patent lawsuits and ITC actions against Taiwan companies are on a dramatic rise (158+ cases in US in past 2 years alone).
 - Taiwan Electronics companies are paying, on average, 5~10 % royalties per case settled, amounting to billions of US\$.

Taiwan Under Siege

Statistical Summary of US Cases – past 2 Years

| High-Tech Industry | Cases | % |
|---|-------|-----|
| Cell Phone, network and Communication | 28 | 18% |
| IT | 40 | 25% |
| Optoelectronic (Antitrust cases are exclusive.) | 48 | 30% |
| Semiconductor and Component (Antitrust cases are exclusive.) | 42 | 27% |
| Total: | 158 | |

| | Litigation Cases in Numbers by Jurisdiction |
|------------------------|---|
| ITC | 15 |
| Federal District Court | 143 |
| Total: | 158 |

Taiwan Under Siege

● Taiwan Today – Defensive mode

- Foreign Companies have shifted tactics from earlier “carrot” to current “stick” approach
- Forcing Taiwan companies to take patent licenses at significant expense.
- “License/pay or be sued”.
- Little or no analytical capability or competitive intelligence.
- Suffering from sole focus on portfolio numbers rather than claim quality.
- Fear factor – inability to fight back and to force the licensor to prove infringement.
 - ◆ “FUD” = Fear, uncertainty and doubt.
- Should be top priority of Ma Ying Jeou administration.
- Look at LED industry as an example (next slide)

Major LED Litigation (Taiwan Companies)



- Nichia.
 - Everlight (億光) (Taiwan)
 - ◆ Patent infringement; Taipei Court ordered Everlight to pay NTD80mm. Case on appeal.
 - AOT (台灣先進) (Taiwan)
 - ◆ Patent infringement; Case dismissed in 2005.
 - Harvatek (宏齊) (U.S.)
 - ◆ Patent infringement; pending.
- Lumileds.
 - Epistar (晶元光電) (U.S., ITC, Taiwan)
 - ◆ Patent infringement; U.S. ITC held Epistar infringement. Case on appeal.
 - ◆ Settled Taiwan patent infringement claims.
 - United Epitaxy Company (國聯光電) (US and Taiwan) -Patent infringement;
- Osram.
 - Kingbright (今台) (Germany), Patent infringement; court held infringement. Case on appeal.

LED Licensing Activities – Taiwan Companies



- By Taiwan Companies.
 - Epistar (晶元光電)
 - ◆ Manufacturing license from Toyoda-Gosei.
 - Bright View (顯明)
 - ◆ Patent license from Toyoda-Gosei.
 - OPTO Technology (光磊)
 - ◆ Nichia invested in OPTO in 2005.
 - Everlight (億光) / Lite-On (光寶) / Harvatek (宏齊) / Yashin (雅新實業)
 - ◆ Patent license from Osram (White LED Technology)
 - Edison Opto (艾笛森光電) / Unity Opto (東貝) Prolight Opto (葳天科技) / Bright LED (佰鴻)
 - ◆ Patent license from Intermatix.

Taiwan Under Siege

- **Present Day Taiwan – general perspective on Intellectual Property (Japan and Korea had similar characteristics at comparable stages of development):**
 - Narrowly focused on patents from technical perspective and under responsibility of CTO not General Counsel.
 - Patents for quantity sake;
 - In the “business” of preparing and processing patent applications through outside counsel and not in-house;
 - Short-term perspective;
 - Non-strategic;
 - No systematic approach (innovation for innovation’s sake)
 - Not viewed by most as an “asset”;
 - Large pay-out to infringement claimants
 - Lack meaningful portfolio acquisition strategy;
 - Limited budget;
 - “Penny wise – pound foolish” litigation tactics; and
 - Fail to exploit commercial leverage effectively.

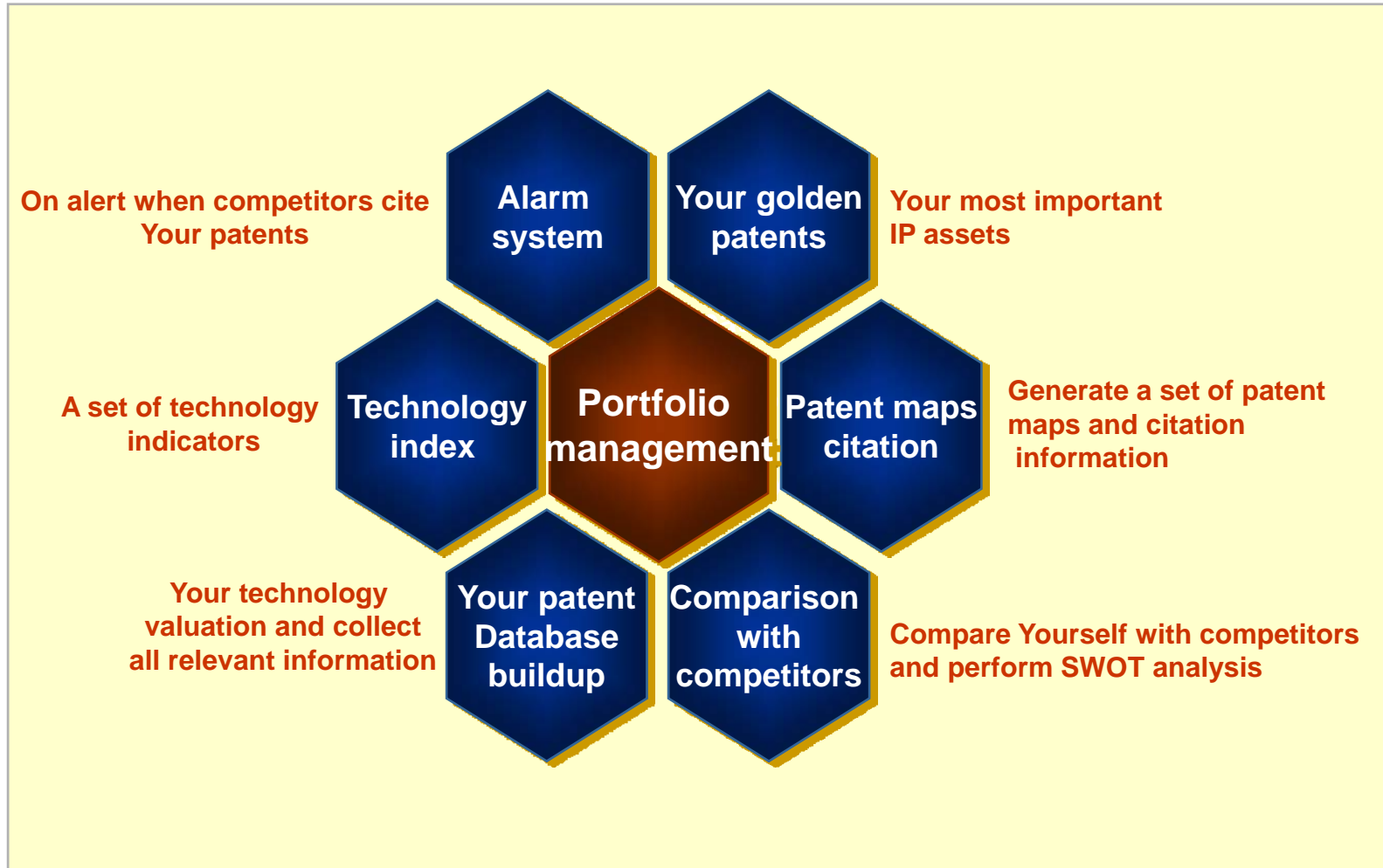
Taiwan Under Siege

- **New Perspective – Mindset change is needed:**
 - Initial focus on patents as first phase of intellectual Capital Management initiative.
 - Coverage broadened to include all IP.
 - Enhancing shareholder value across all areas of a company.
 - Focus on quality of IP, not quantity.
 - Long-term, strategic value added;
 - Designed to evolve hand-in-hand with business strategies.
 - IP as extremely valuable assets.
 - Expanded revenue and profit generation.
 - Driving Taiwan companies to “visionary” level of Anderson pyramid in their commercial sectors.

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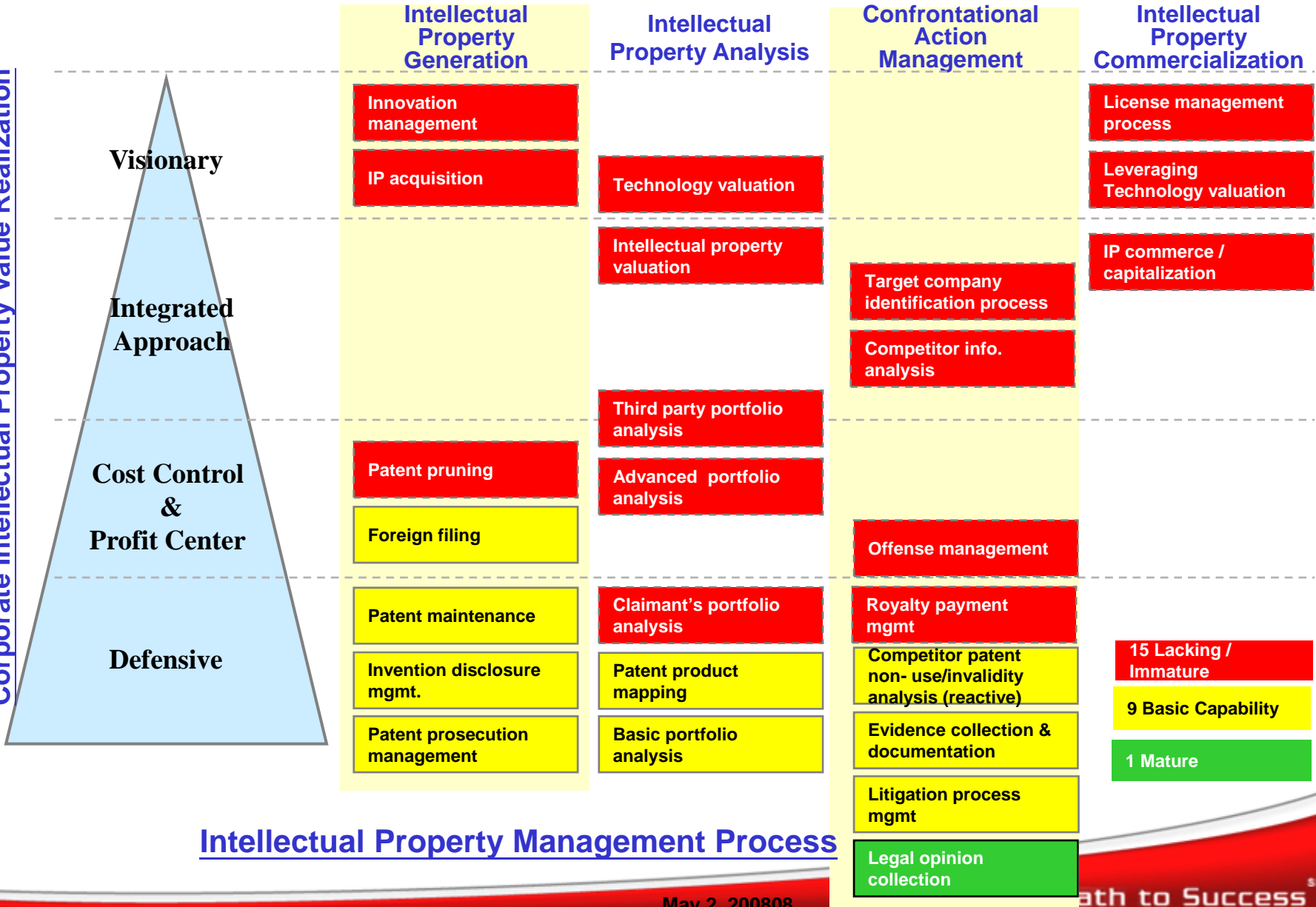
- **What should be done (long term) - IP portfolio value proposition.**
 - Key elements of program
 - ◆ Create core intellectual capital management initiative
 - ◆ Anderson pyramid -
 - Defensive
 - Cost savings
 - Profit
 - Integrated
 - Visionary
 - ◆ Portfolio evaluation and acquisition.
 - ◆ Reverse engineering (competitive analysis).
 - ◆ Program management.

Company Portfolio Management



Pre - ICM Capability Audit (hypothetical)

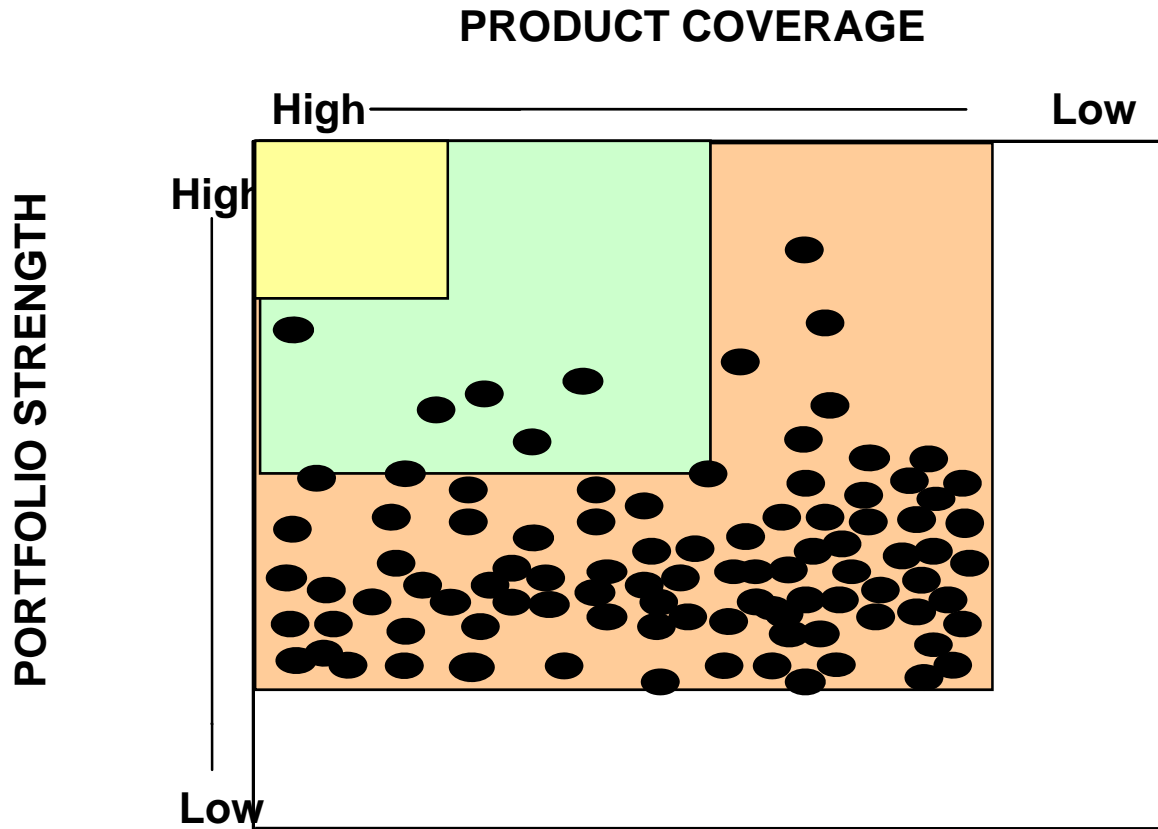
Corporate Intellectual Property Value Realization



Intellectual Property Management Process

Portfolio Analysis

Rating Your Portfolio – Illustrative Approach
 Less Than Ideal (but typical) Situation in Taiwan Today



Notes:

- | | | |
|--|------------------------|---------------------------------|
| | "Golden Patents" | (our strongest patents) |
| | Core Licensing Patents | (our key licensing patents) |
| | "Must Have" Patents | (our key use/operation patents) |

Taiwan Under Siege – The Next Wave: The Trolls

- What is a “Troll”? - A Patent Troll is a person (or organization) which tries to make a lot of money from a patent that they are not practicing and have no intention of practicing and in most cases never practiced. (Peter Detkin, former Assistant General Counsel at Intel, quoted in “Trolling for Dollars,” *The Recorder*, July 30, 2001)



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● Partial List of U.S. Trolls

- Acacia Technologies ADC Tech K.K
- Anascape BT Exact
- Burst.com DEKA Research Corporation
- DataTreasury Eon-Net
- EpicRealm Fenner Investments
- Forgent Networks General Patent Corporation
- Immersion Corporation Intellectual Ventures
- Intertrust Lemelson Foundation
- MercExchange Millenium LP
- Plasma Physics NTP, Inc.
- Rembrandt Ron Katz Licensing
- Sorensen Research and Development Trust
- Syndia ThinkFire

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Rick Tsai, President and CEO
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March 30, 2008

Re: US Utility Patent application 11/418,493

We would like to present to your attention a new architecture of integrated-circuits, promising to further increase their speed as well as to reduce power dissipation. The invention proposes a significant improvement of CMOS IC technology by providing high speed bipolar current amplifiers compatible with CMOS technological process while retaining the footprint compatible to standard CMOS devices.

The proposed circuit is meant to replace a standard FET in CMOS ICs when a buffer or high current output is desired: reading transistor in memory arrays, output transistors in CMOS buffers, output transistors in CMOS gates. For memory, the higher current would allow faster reading cycles. For CMOS buffers, the higher current capability would eliminate a need for bulky multistage circuits. For CMOS gates, the integrated current amplifier would eliminate a need to double the circuit or to buffer it with additional inverters in order to improve its fan-out.

Thus, we offer a new architecture of an IGBT where the drain of a FET is the base of a bipolar transistor and the collector of the bipolar transistor contains the source of the FET. In this way the whole circuit becomes very compact and very convenient to be multiplied within a single integrated circuit. A reinforced isolating closure of the circuit will limit its size and reduce volume charge leading to a high switching performance compatible with a standard CMOS, further allowing for cross talk reduction.

The invented circuit is functionally compatible with CMOS in terms of operational speed and switching voltage levels; technologically compatible, meaning modification of CMOS technology should be able to produce simultaneously standard CMOS devices together with devices of this invention; footprint compatible, meaning the circuits of this invention are comparable in size with standard CMOS devices and having a high current drive capability they will increase the overall density of the integrated circuit.

This invention has been recently disclosed in the United States Patent and Trademark Office publication, a copy of which is attached to this letter. If any other additional information is required we will be pleased to provide it to you.

We truly believe that the proposed IC architecture will soon be dominant on the market and we are honored to offer you exclusive rights on this unique technology.

We wish you best of luck in your great business,

Sergoy Antonov
Director

Forward to: Dick Thornton
Patent troll case David Su
please handle.
thanks. Jack

SCIENCE BUREAU INC.

Taiwan Under Siege

- Negotiating Strategies For Target Company
 - Basic Troll Approach and Behavior
 - Best troll patents cover an invention that is used in large market with many players
 - Examples:*
 - Orion patent, software for preparation of customized product literature, and
 - Konrad patent, local/remote computer communication
 - Seek to accumulate a large portfolio for statistical purposes.
 - License fee demanded is usually less (to early licensees) than the projected cost of defending the case in court; price usually increases as settlements occur.
 - Initial settlements provide “war chest” to sustain program, fund lawsuits against large number of defendants or target one/two profitable market leaders.
 - Trolls are most often sophisticated and very well funded.

Taiwan Under Siege

- Considerations in Negotiating with US Troll (con't)
 - Buy the troll.
 - Set up a patent acquisition fund to bid against Trolls in buying available portfolios.
 - *Ex parte* reexamination; filing of nullity action or opposition against foreign counterpart
 - Try to determine if troll's lawyers on contingency; try to determine overall bounds of troll's intended licensing program, who else has been / will be approached
 - Protect against willful infringement exposure; *In re Seagate Technology*, possible benefit of counsel's opinion
 - Do NOT assume you will roll over troll, if you push matter to litigation.
 - Common defense with other similarly situated companies.