



**Semiconductor**  
insights<sup>inc.</sup>

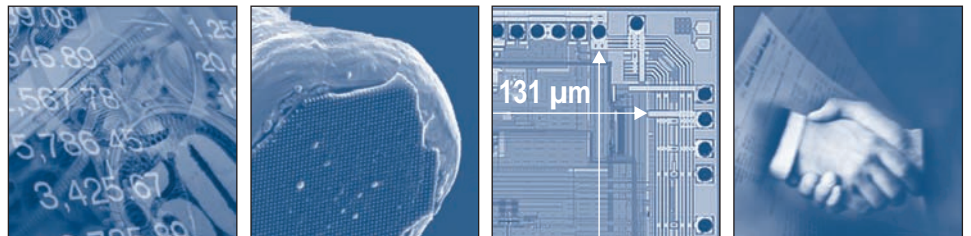
# IPinsights<sup>TM</sup>

for CORPORATE LEGAL and IP PROFESSIONALS in the  
ELECTRONICS INDUSTRY

**PROTECT** key technologies

**UTILIZE IP** for profit

**CROSS-LICENSE** to access key  
technologies



United Business Media

[www.semiconductor.com](http://www.semiconductor.com)



# IPinsights™

Today's competitive business environment, with increased cost and revenue pressures, presents new challenges and opportunities for in-house counsel. Under the IPinsights brand, SI helps technology companies and legal professionals evaluate, develop and monetize their intellectual property with services focused on IP strategy development, patent portfolio management, and infringement investigations of unlicensed products.

Semiconductor Insights has close to two decades of reverse engineering and critical patent review experience in support of specific client objectives. Starting with the technology landscape, we help put your invention submissions and patents in the context of your own business strategy and that of your competitors. Next, we help you identify and protect your proprietary technical advantage. Finally, with an established patent portfolio, we help you identify the gems, those with the best promise of strong licensing returns. Within the semiconductor industry, we have participated in virtually every major semiconductor licensing campaign back to 1989, and have a Prior Art library dating to the mid 1970's. Let us show you how we've helped companies like [Texas Instruments](#), [Intel](#), and [Motorola](#) attain their strategic goals.



## IPinsights will help you:

- Identify key design, process, & technology innovations internally and externally
- Protect proprietary technical advantages
- Evaluate, develop, and monetize your intellectual property

Semiconductor Insights has participated in virtually every major semiconductor licensing campaign since 1989 and counts Intel, Motorola, and Texas Instruments among its IPinsights clients.

## FAST FACTS

- Forensic reverse engineering and sophisticated investigative techniques
- Prior Art library dating from the mid 1970's
- 5000+ ready-to-use analysis reports
- 18000+ different components, products, and IC's - some of which are no longer commercially available
- 150+ new devices investigated each month
- Proprietary IC extraction and modeling tools
- Seven US Patents, more pending
- Access to hundreds of external technical databases
- Strategic sourcing and parts procurement

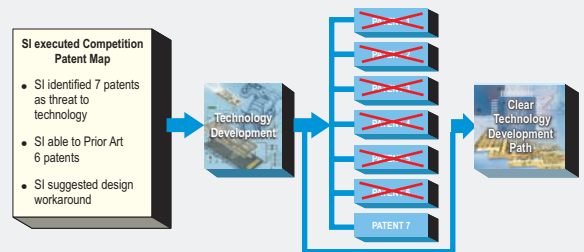
## TECHNOLOGY

Our domain expertise includes:

- Consumer Electronics
- Wireless
- Networking
- Semiconductors
- Computers
- Automotive

## MAP the Technology Landscape - IP Landscape

It is vital to put invention submissions and patents in the context of your own business strategy and that of your competitors - in effect, seeing the forest through the trees. Semiconductor Insights helps clients assess the technology and patent landscape associated with both current and future products/services to identify gaps in a company's patent portfolio, as well as unclaimed "territories" in relevant emerging markets and technologies. Our IP Landscape service provides clients with valuable insight into the nature and potential evolution of particular markets.



Navigating Competitive Patent Roadblocks

### IP LANDSCAPE SERVICE

- Identify relevant papers, patents, and applications that are visible
- Determine the division of the technology space
- Get a clear view of what's in the public domain, what's proprietary, and what's unclaimed

#### VALUE

- Highlights roadblocks to product development - get the information to navigate around
- Identifies opportunities for future technology development and patenting
- Identifies alternative applications and markets - access to SI's industry wide exposure to products, papers, and best practices
- Delivers competitive intelligence

## OPTIMIZE your Portfolio - Patent Brokerage

Intellectual Property (IP) is one of your most valuable business assets. Like physical assets, IP must be developed, maintained, accounted for, and properly managed to extract its full value. However, the value of IP is relative. Just as organizations seek to divest business units that are no longer strategic and/or acquire new ones that are, companies need to look at their patent portfolios within a strategic context and decide to invest or divest accordingly.

### PATENT BROKERAGE SERVICE

- Different levels of engagement
- Help prospective sellers mine their patent portfolio
- Provide sellers with Technical Due Diligence package on their patent(s) including file wrapper investigation and probability assessment of related art
- Assist buyers with a routine search
- Agents welcome

#### VALUE

- Objectivity and independence
- Access to qualified buyers and sellers
- Accelerated transactions
- Fair market value transactions
- Lateral thinking from broad technology exposure. Recognize potential opportunities in related technology areas (i.e. processor patent applicability to gaming industry)



# PROTECT your Advantage - Patent Development

Regardless of whether you are a start up or a new business unit in an established company, it is critical to identify your proprietary technical advantage early on, and protect it. As well, patents have become a new source of sought after revenues in technology companies and a metric for corporate valuation by the investment community. Semiconductor Insights' Patent Development Service (PDS) lets you architect for value. You start with a clear idea of what to protect. With in-depth technical expertise and visibility into cross-industry best practices, SI minimizes the burden on your design team in communicating and documenting the invention for the patent agent. We work with our partner patent firms to file the application and provide full support to you through the patent prosecution process. This frees up your inventors and management team to focus on getting the right product to market at the right time.



## PATENT DEVELOPMENT SERVICE

- Substantiate and evaluate patent idea(s)
- Perform Prior Art searches
- Architect supportable patents
- Work with partner firms to file applications and manage the patenting process

### VALUE

- Protect key technical assets and associated market advantage
- Protect downstream licensing revenue potential
- Stay focused on getting product to market by not diverting engineering time or resources
- Reduce overall patenting costs by staying focused on the business's competitive advantages
- Realize supportable patents
- Increase your company's valuation

### QUOTABLE

"SI's experience and in-depth analyses enables us to determine our best infringement cases and then present them in a straightforward manner. This is critical to a successful licensing program."

Frank Cimino, Patent Licensing Counsel, Texas Instruments

# CAPITALIZE on your Technology - Licensing

Patents have long been a strategic asset in the battle to protect market share and key technologies. More recently, patents have also become a new source of sought after revenues for technology companies and a key metric for corporate valuation by the investment community. A recent study by McKinsey suggests that IP (patents, proprietary technologies, and process) should generate between 5 and 10% of a company's operating income (vs. an average of 0.5% today).

## ■ PATENT & PORTFOLIO REVIEWS

Whether your portfolio includes one patent or hundreds, SI will assess the ability to support patents intended for use in your licensing campaigns or litigation cases. We quickly understand the technical implications of the patent language, architecture, embodiments and claims. This lets you identify the patents in your portfolio that:

- Cover sound technology
- Are supportable with concrete evidence
- Disclose or protect technology used in industry

### VALUE

- Strong set of patents for licensing and litigation
- Sound strategy to demonstrate evidence of infringement
- Maximize licensing revenues

## ■ LICENSING TARGET ASSESSMENT

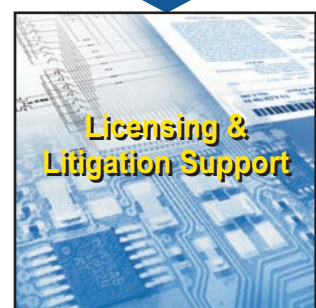
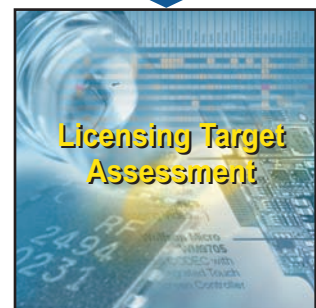
With your licensing or litigation goals in mind, utilize SI's knowledge base of technology practices, trends, and open market reports to:

- Determine companies and products that may infringe
- Find specific targets that have strong commercial interest and revenues
- Investigate additional technologies of relevance to the portfolio

### VALUE

- Accelerate time to license revenues through access to SI's library of existing analysis
- Qualified list of target companies and products
- Maximize overall licensing revenues
- Industry wide perspective enables application of patent claims

### Licensing Life Cycle



**We Know Technology...  
We Know Patents**



## ■ TECHNICAL & PATENT INFRINGEMENT

Licensing activity in the technology industry continues to accelerate. Potential licensees, licensors, and the legal system are increasingly seeking hard evidence to substantiate claims and valuations. In electronics, that means Reverse Engineering (RE). Armed with RE results, prospective licensors are able to **build a stronger case, accelerate time to license revenues, maximize licensing valuations, and limit retaliation risk**. As well, the payback on RE in terms of time and money well exceeds that of bringing even a modest patent case to trial.

SI works with you to determine the most appropriate reverse engineering technique(s) to support your specific licensing and litigation goals. SI has made and continues to make the investment to effectively support the advanced RE approaches outlined below:

- Process analysis of device fabrication
- Leading edge functional testing (or black box testing)
- Detailed and precise circuit extraction

### VALUE

- Technical evidence establishes credibility
- Get the attention of prospective licensees
- Documented technical evidence presented in court ready format that can be easily understood by non-technical audiences

IPinsights lets you accelerate your licensing campaigns with irrefutable evidence of infringement and limits your risk of retaliation. This reduces your cost to defend and, in many cases, lets you avoid going to trial altogether. Contrast that payback with a typical 3 year timeframe to bring a patent case to trial and an average litigation cost of \$US4-8 Million for a modest case.

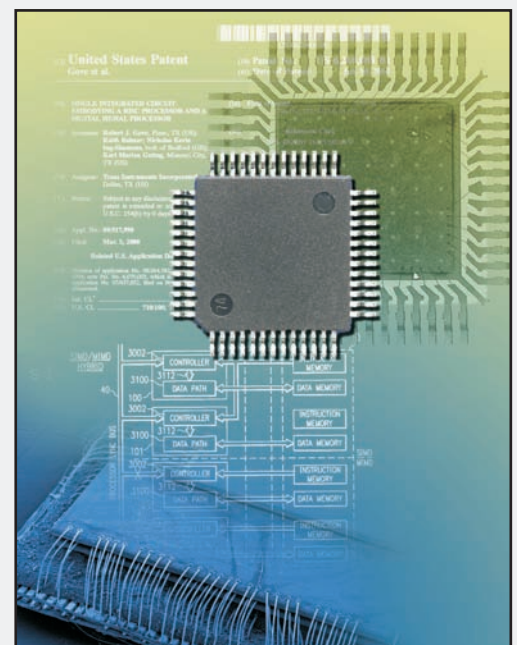
## ■ LICENSING & LITIGATION SUPPORT

If your campaign proceeds to litigation, SI will help strengthen your case and counter opponents with:

- Prior Art
- Rebuttal of competitor's technical arguments
- World-class technical support and advice
- Trial proven factual and expert witness testimony

### VALUE

- Real-time, critical litigation and licensing support
- Ability to meet tight timeframes with quick turnaround of technical evidence
- Win your case



# WHY Semiconductor Insights

- Proven ability to execute and scale including:
  - Support for virtually all major semiconductor licensing campaigns back to 1989, including a \$US800 Million settlement for Texas Instruments
  - Within the past year we have executed over 1800 different projects on behalf of 200+ customers, Analyzing 150+ new parts each month, and an average of 5000 patents each year.
  - Average 200 licensing campaigns each year
- Continued investment in the tools and techniques to provide timely quality reverse engineering results
- Trial tested procedures and documentation
- Seamless access to the skills and efficiencies of our offshore engineering team

## ABOUT OUR CLIENTS

- Texas Instruments secured a licensing royalty settlement of \$US800 Million
- “Reverse engineering provides the ammunition ... The technical investigation and documentation Provided by SI lets us focus on the target.” - Motorola
- “SI is integral to both our defensive and assertive licensing efforts” - Intel
- Agere verified patent infringement by and subsequently licensed a key competitor

### The CASE for REVERSE ENGINEERING

- **Process Analysis** provides the ability to recreate the process flow, determine mask count, and, in effect, apply process patents based on artifacts left behind during the manufacturing process
- **Functional Test** or **Black Box Test** is used to establish patent claims that describe a certain behavior, operation, or function without specific implementation details. This technique is extremely effective for patent claims of programming algorithms in flash memories.
- **Circuit Extraction** provides the ability to determine circuit details in order to recreate the design schematics.

Semiconductor Insights has made and continues to make the investment to effectively support advanced RE approaches and associated techniques. SI works with clients to determine the most appropriate technique(s) to support their specific licensing goals and objectives.

### About Semiconductor Insights – A CMP Company

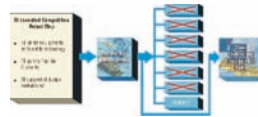
Semiconductor Insights (SI) ([www.semiconductor.com](http://www.semiconductor.com)) is the leading technical advisor to the world's microelectronics community. SI supports its clients through the technical investigation of patents, integrated circuits and electronic systems. Its TECHinsights division helps technology companies benchmark competing devices, improve time to market and solve technical problems while its IPinsights division helps technology companies and legal professionals evaluate, develop and monetize their intellectual property. Typical clients are major electronics and semiconductor corporations in Japan, Korea, Taiwan, Europe and North America and the law firms that represent them. SI is a division of CMP ([www.cmp.com](http://www.cmp.com)).

# IPinsights™ for corporate counsel

## ► IP Landscape

Identify industry stakeholders. Determine the technology landscape.

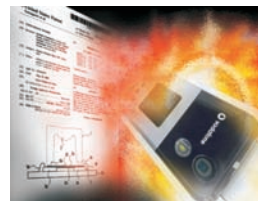
- Highlights roadblocks to product development - get the information to navigate around
- Identifies opportunities for future technology development and patenting
- Identifies alternative applications and markets - access to SI's industry wide exposure to products, papers, and best practices
- Delivers competitive intelligence



## ► Patent Brokerage

Bring buyers and sellers of patents together.

- Access to qualified buyers and sellers
- Accelerated transactions
- Fair market value transactions
- Capitalize on broad technology exposure to recognize opportunities in related technology areas



## ► Patent Development

Identify your technical advantage and protect it.

- Protect key technical assets and associated market advantage
- Protect downstream licensing revenue potential
- Stay focused on getting product to market by not diverting engineering time or resources
- Reduce overall patenting costs by staying focused on the business's competitive advantages
- Realize supportable patents
- Increase your company's valuation



## ► Licensing

### Portfolio Management & Patent Evaluation

Find the gems in your client's patent portfolio.

- Strong set of patents for licensing and litigation
- Sound strategy to demonstrate evidence of infringement
- Maximize licensing revenues



### Licensing Target Assessment

Find the best technical and commercial targets.

- Accelerate time to license revenues through access to SI's library of existing analysis
- List of target companies and products
- Maximize overall licensing revenues
- Industry wide perspective enables broader application of patent claims



### Technical & Patent Infringement

Document concrete evidence of infringement through reverse engineering.

- Technical evidence establishes credibility
- Get the attention of prospective licensees
- Documented technical evidence presented in court ready format that can be easily understood by non-technical audiences



### Licensing & Litigation Support

Strengthen your case and counter opponents.

- Real-time, critical litigation and licensing support
- Ability to meet tight timeframes with quick turnaround of technical evidence
- Win your case

