DIRECTORS ROUNDTABLE

WORLD RECOGNITION of DISTINGUISHED GENERAL COUNSEL

GUEST OF HONOR:

Dr. Richard Thurston

Senior Vice President & General Counsel,
Taiwan Semiconductor Manufacturing Company

THE SPEAKERS

Dr. Richard Thurston
Senior Vice President & General Counsel, Taiwan Semiconductor Manufacturing Company

L. Norwood "Woody" Jameson
Partner, Duane Morris LLP

David O'Dell
Partner, Haynes and Boone, LLP

Scott Cohen
Partner, Jones Day

Brian Ferrall
Partner, Keker & Van Nest LLP

Christopher "Kit" Kaufman
Partner, Latham & Watkins LLP

(The biographies of the speakers are presented at the end of this transcript. Further information about the Directors Roundtable can be found at our website, www.directorsroundtable.com.)

TO THE READER

General Counsel are more important than ever in history. Boards of directors look increasingly to them to enhance financial and business strategy, compliance, and integrity of corporate operations. In recognition of our distinguished Guest of Honor's personal accomplishments in his career and his leadership in the profession, we are honoring Dr. Richard Thurston, General Counsel of Taiwan Semiconductor Manufacturing Company (TSMC), with the leading global honor for General Counsel. TSMC is the world's largest dedicated independent semiconductor foundry and a major supplier to most of the world's largest electronic companies. His address will focus on key issues facing General Counsel of leading technology manufacturing firms. The panelists' additional topics include strategic competition and innovation in the global high-tech industry; dealmaking in high tech; strategic patent development; and major intellectual property litigation.

The Directors Roundtable is a civic group which organizes the preeminent worldwide programming for Directors and their advisors, including General Counsel.

Jack Friedman
Directors Roundtable
Chairman & Moderator

Dr. Richard Thurston

Senior Vice President & General Counsel, Taiwan Semiconductor Manufacturing Company

Dr. Richard Thurston is Senior Vice President and General Counsel of TSMC and is responsible for legal and intellectual property management. Dr. Thurston is famous for his global experience in commercial, technology and international law.

Prior to joining TSMC, Dr. Thurston was a Partner at Kelt Capital Partners, LP, and a member of Haynes and Boone. His practice covered general corporate matters, technology-related transactions, mergers and acquisitions, joint ventures and divestitures, venture capital investments, foreign trade and investment, and the global protection of intellectual property rights.

Before Dr. Thurston joined Haynes and Boone, he served as the Regional Counsel, Asia Pacific and Vice President, Corporate Staff, and Assistant General Counsel for 12 years at Texas Instruments, where he was responsible for legal and M&A activities throughout the Asia Pacific region.

Dr. Thurston graduated *cum laude* with a B.A. degree in History from Alma College, and an M.A. degree and a Ph.D. degree in East Asian Studies from University of Virginia. He received a J.D. degree from Rutgers School of Law. Dr. Thurston also studied R.O.C. Law at Soochow University.

TSMC

Established in 1987, TSMC is the world's first dedicated semiconductor foundry. As the founder and a leader of the Dedicated IC Foundry segment, TSMC has built its reputation by offering advanced and "More-than-Moore" wafer production processes and unparalleled manufacturing efficiency. From its inception, TSMC has consistently offered the foundry segment's leading technologies and TSMC COMPATIBLE® design services.

TSMC has consistently experienced strong growth by building solid partnerships with its customers, large and small. IC suppliers from around the world trust TSMC with their manufacturing needs, thanks to its unique integration of cutting-edge process technologies, pioneering design services, manufacturing productivity and product quality.

The company's total managed capacity reached 15.1 million eight-inch equivalent wafers in 2012. TSMC operates three advanced 12-inch wafer fabs, four eight-inch wafer fabs, and one six-inch wafer fab in Taiwan. TSMC also manages two eight-inch fabs at wholly owned subsidiaries: WaferTech in the United States and TSMC China Company Limited. TSMC also obtains eight-inch wafer capacity from other companies in which the company has an equity interest.

To better manage its long-term strategic growth, TSMC is investing in lighting and solar energy related-industries. With differentiated technology offerings and unique value propositions, TSMC will aggressively pursue new opportunities in these fields.

Our vision is to be the most advanced and largest technology and foundry services provider to fabless companies and IDMs, and in partnership with them, to forge a powerful competitive force in the semiconductor industry.

To realize our vision, we must have the following strengths:

1. be a technology leader, competitive with the leading IDMs

2. be the manufacturing leader

3. be the most reputable, service-oriented and maximum-total-benefits silicon foundry.

Our mission is to be the trusted technology and capacity provider of the global logic IC industry for years to come.

JACK FRIEDMAN: I'm Jack Friedman, Chairman of the Directors Roundtable. We are a civic group and have done 800 events in 14 countries for Boards of Directors and their advisors, which can include the General Counsel. We never charge to attend a program or receive the materials and transcripts.

Boards of Directors have told us that companies rarely get praise for the good that they do. We think that it's very important for people to have knowledge of the efforts that companies make to be good citizens, how they operate, and how they reconcile legal issues with corporate strategy. We are privileged today to present the leading world honor for General Counsel to Dick Thurston of Taiwan Semiconductor Manufacturing Company.

There are a few points about Dick's background that I would like to mention. He is from New York and went to Rutgers Law. He has a Ph.D. in Chinese Law from the University of Virginia. Dick also worked in industry at Texas Instruments and various law firms before his current position in Taiwan. It is a great privilege to have him here to speak. Later I will introduce the Panelists who are partners at distinguished law firms.

Dick Thurston will now make his opening remarks.

DR. RICHARD THURSTON: Good morning, everyone. Don't worry — I'll speak in English, not Chinese! Although I can speak in Chinese, if you like.

This morning, I'm going to walk you through a brief introduction of TSMC, and then the legal organization and some of the issues that we face. The title, as you can see, is about nimbleness and competitiveness. Hopefully throughout the presentation, that will come through and you'll understand why that's very important.

When I talk about nimbleness — and what's very unique about TSMC and other Taiwan companies — is that we are a Taiwan, Republic of China, company. Why I emphasize that is first of all, Taiwan is not China, regardless of what China may say. Today, there are major student protests going on in the Legislature of Taiwan (which the students have occupied). It actually might be good if we transport them from Taiwan to here, and let them sit in Washington and criticize our U.S. legislators about whatever they don't do. In Taiwan, they are protesting a trade agreement with China which the Taiwan government has entered into but is not being discussed or passed through legislation. Democracy in action! But, what is important to TSMC is that we have to operate as a global company out of Taiwan, which is largely politically estranged due to China's efforts: Taiwan is not a member of the U.N. It was kicked out in 1971, and only 21 U.N. member countries and the Vatican recognize Taiwan. In Taiwan, we don't have the global politics or treaty protection. This is particularly true from the legal point of view of even getting judgments enforced. Also, we don't have the advantages of having a strong USTR to fight trade battles, and a whole range of things. As to patents — we have to go through individual registrations around the world, rather than going through one unified PCT (Patent Cooperation Treaty) approach. It is a challenge in how we can make sure that TSMC is respected and protected around the world.

Another interesting fact to point out (which goes to Taiwan being a democracy and governed by rule of law), is that, believe it or not, we have 165 colleges for only 24 million people. I've noticed most folks believe that Taiwan has reached its peak, like Japan and others. But it is not on a downhill trend. Taiwan remains a vibrant, highly innovative technology. We are the second highest country in the world in density for countries over 10 million in population. Three-quarters of Taiwan, if you haven't been there, is all mountain range. The highest mountain peak in all of East Asia, even compared to Japan, is in Taiwan. If you haven't visited, I do recommend a visit, because it is a really beautiful country, as the Portuguese name used to call it — *Isle de Formosa* [beautiful island].

In the context of TSMC, who are we? We are a $20+ billion company, as reported for 2013, and growing. We are, depending on the stock price on NYSE, a $100+ billion market cap company, and the largest, by far, of any Taiwan companies and most Asian companies. We are located in Hsinchu,

Taiwan. Hsinchu is where Taiwan's first science park is located. With a lot of foresight, the Taiwan government, back in the late '70s, decided that it was going to break out of the agricultural industry and focus on high tech. In 1976, I visited the site of what is now Hsinchu Science Park, when I was attending law school in Taiwan. They created this high-tech mecca and it is now one of the most densely populated locations of semiconductor and other cleanroom fabs in the world.

TSMC is what is known as a "foundry." We manufacture semiconductor products for other companies. We have over 450 active corporate customers. Our customer base is over 700. We don't sell the end product; we sell the semiconductor chips — the brains that go into virtually every consumer electronics product in the world — to companies like Texas Instruments, Nvidia, Qualcomm, and Broadcom. And even our competition, such as Intel and Samsung, use our chips in their products.

Dr. Morris Chang pioneered the industry here. He is the Chairman of the company and keeps us all running on our toes. That includes our outside counsel who have had to present before him, and he is only 82 years young! He comes into work every day, 9 to 6, and he really keeps me on my toes.

We have over 40,000 employees worldwide. I joined the company in January 2002, and at that time we were slightly less than 20,000 active employees. We operate globally. We manufacture in the United States, China, Taiwan, and in Singapore. Most of our facilities are located in Taiwan. We've really mastered the efficiencies of scale, making chips at a 99.8% yield out of 100%. That's unheard of in the industry, especially manufacturing, when we are now at production of 20 nanometer technologies. We are currently doing early-stage research on 7 nanometer technology, which, at this point in time, probably cannot be manufactured. There are no lithography tools yet in the market that can do the photolithography that implants the mask work onto the chip. This area, photolithography, is where we have been involved in M&A, a lot of outside counsel advice, especially trust counsel.

The biggest recent M&A that we have been involved in was a $1 billion investment into ASML, a European company; Intel made a huge investment — over a billion dollars — as did Samsung. It was the M&A deal of the year in Europe about a year ago.

Huge investment is part of the key issue. Our gross revenue was $20+ billion last year; our profit and return on investment is at the leading edge for the industry. This is in part because of my boss's efforts to constantly keep costs down, as our outside counsel firms know quite well! Ken Adamo, here, is rolling his eyeballs about that! Overall, it's really necessary when we are manufacturing almost 9,000 different products. That means that in our manufacturing facilities, we have multiple levels of technology going on at any one time: more than 200 different process technologies. I'll come back to that as it relates to what the Legal Department does in a couple of areas.

We are one of the leaders when it comes to research and development — eight to nine percent of our gross revenue is invested in R&D each year. We are truly driving innovation that allows our lives to be, hopefully, less complicated and more efficient within the entire range of semiconductor technology. Whether it's computers, smart devices, automotive, or medical devices; our chips, our process technology is in all those devices.

When you look at how we are managed, we are fundamentally a very western-managed corporation, but within the context of a very different Taiwan legal environment. We have to comply with the Taiwan company law; that's very different from Delaware law, or any U.S. corporate law.

We have a chairman, and two co-CEOs. It is an unusual structure, but it seems to be working well. We have a board of

nine members, the majority of whom are independent directors from around the world, including Tom Engibous, former Chairman of Texas Instruments; and Sir Peter Bonfield of British Telephone. We operate at the board meetings, and the whole board structure, very much on a western basis, but within the parameters of Taiwan laws. We have, though, not as many Board committees — thank goodness — only two. The Audit Committee was established in August of 2002. One of the first things that I got our chairman to do was to create an Audit Committee; and then we have a Compensation Committee, both meeting at least once a quarter.

We have a range of what virtually every other U.S. publicly traded company will have, including an ethics charter, and a strong internal control system — which, actually, the Taiwan government has very well regulated and a lot of requirements based on that.

Social responsibility — Jack asked me to talk a little bit about that. We are one of the leaders in the world, and certainly in our semiconductor industry, as the Dow Jones Sustainability Index (DJSI) has recognized. In 2013, we were designated by the DJSI as the group leader in the

microelectronics semiconductor/semiconductor equipment segment. We have been on the DJSI for 13 consecutive years. We prepare a publication annually on our corporate social responsibility; it covers all areas, as you see on here. Most of our advanced fabs are green. Right now, we manufacture twelve-inch, pizza pie-sized wafers. We are, along with the industry consortium, here in Albany, New York, trying to figure out how to make 450 mm, or eighteen-inch, wafers. It's an extremely difficult process to spin one of these things and to keep it straight, uniform, and flat. We are building these products in totally green fabs. What is not generally known is that we also have a solar subsidiary and an LED subsidiary.

We have many environmental, accounting, internal processes and procedures to keep our costs, the benefits, international treaties, in the environmental area. We are members of, and do lead in that area.

We are active in many other areas. For example, we are proud of our endowments — our foundation program, which has a major focus on education and helping the underprivileged in Taiwan. We also sponsor a wide range of cultural programs, including a large number of orchestras that visit from the United States, Europe and other regions.

A couple of years ago, a super typhoon, called Morakot, hit southern Taiwan. It destroyed many villages; we had over 1,000 TSMC employee volunteers who went to southern Taiwan to help rebuild local infrastructure and industry, all with TSMC funding.

We file a 20F every year and prepare an English-language annual report that is available on our website, so you can get a better understanding about TSMC. But we're very proud of our social consciousness and working closely with what still is, like in most countries, a large level of impoverished people. Particularly in Taiwan, where you have a huge mountain range, it is all earthquake-prone, and the nature of the topography causes tremendous mudslides and cave-ins for villages. We get very involved in these initiatives under Dr. Chang's strong encouragement.

> "In Taiwan, we don't have the global politics or treaty protection. This is particularly true from the legal point of view of even getting judgments enforced. Also, we don't have the advantages of having a strong USTR to fight trade battles, and a whole range of things. As to patents — we have to go through individual registrations around the world, rather than going through one unified PCT (Patent Cooperation Treaty) approach." — *Dr. Richard Thurston*

As to the legal organization, I am the corporation's second General Counsel. It is a young company, founded in 1987, and for many years, they did not have a formal legal organization. I joined in January 2002; and today, we have a legal department that is 70+ people strong.

One great thing about TSMC is that I've been able to hire talent from a global pool of licensed lawyers. When I joined the company back in 2002, there were only about five, including myself, who were licensed — having passed the bar exams and who received their license from various jurisdictions. Taiwan is one of the most difficult jurisdictions to pass. It reminded me of when I was taking the bar in New Jersey (My father was a reader for New Jersey). He was very proud that at one time, he'd only passed 25% of the folks who sat for the exam! This was a number of years ago. But in Taiwan only about 11% of the folks who take the Bar exam pass. It is a common thing around Asia to not have a lot of licensed lawyers. I will never forget that when I started dating my wife (who is Chinese) back in the mid-'70s, she told me, "Watch out, the first time you meet my father — he told me that there are two people I can never date or marry — one's a politician and one's a lawyer!" Although I wasn't yet officially a lawyer at that point in time, but studying to be one. It is largely because lawyers are viewed as disruptors of society: destroying the stability, the tranquility. It is probably true to some degree, although I got along better with my father-in-law than my wife's sister-in-law and brother-in-law did! Until the day he died, we got along extremely well.

One of the things that we do in the Legal Department is that we take advantage of a very strong technical staff. In addition to our lawyers, we have eleven Masters and Ph.D.s from top universities around the world. A number of years ago, I took out of the R&D organization a group of eleven folks who were brought into Legal to do a lot of the technical analysis, particularly when we are looking at patent infringement matters. Of course, when we're doing patent prosecution — and I'll talk about that shortly — they play a very, very significant role, and have become quite influential in creating a more strategically-driven portfolio. Because we are manufacturing in a number of countries, we also have legal staff located around the world (China, Japan, Taiwan, Europe and in the U.S.).

One of the things that I'd love to talk about more, but don't have enough time, is the database that we have created to manage our 80,000 contracts; 75% of which are active today. One of the most important contracts that we enter into is a non-disclosure agreement. I'll talk a little bit about their importance to our trade secrets. We don't do a template non-disclosure/confidentiality

agreement. We spend time on each one. For our advanced technologies, starting at the 45 nanometer, and especially at 28, all of our NDAs are perpetual term. I've found that the technology that we're using — your people have heard of Moore's law, and the end of Moore's law — but if we look at the technology we're using — and losing, sometimes, in theft — it has a life of more than 20 years. We don't know the end of it. We're still manufacturing product at a half-micron and larger. When we sued one of our competitors, SMIC, we also included in that lawsuit .35 (point-three-five) micron technology, which was invented back in the early '90s.

During our relationship with our customers, there's a lot of sharing of our key asset, which is our process technology. That is why this number of NDAs and other contracts is so huge. Every single contract we enter — not just non-disclosure agreements — is customized. We don't sell product out in the market; we sell to customers who then incorporate it and use it; and that creates a lot of challenges for us.

Trade secrets are TSMC's most important intellectual property. Throughout my career I have advocated stronger trade secret protection. With every single TSMC patent application we file, we have anywhere from 10 to 100 trade secrets behind it. We file in the patent application all of the information that is required under U.S. law or other laws, but that means that a lot of information is not filed, since we're a process company. That's a key area.

Last, but not least, is litigation. I'll talk about the litigation in the patent area, which is largely for the non-performing entities.

To move through this, when we look at regulatory compliance, I am the Chief Compliance Officer at TSMC. For a lot of companies, there is debate about whether it should be within Legal or outside of Legal. We have chosen to do it within Legal. The areas are the same that all of you have to

deal with, whether or not you're a company's corporate position or legal counsel. In Taiwan, we have to operate under a multi-tiered process. Taiwan has its own laws, in some cases, such as privacy. Taiwan has, actually, the strictest privacy law in the world — even stricter than Massachusetts and some other states. We basically take, as a general policy for all of our regulatory compliance, whatever is the strictest or the broadest requirements in the world, and then apply that within our policies and procedures. We have multiple teams that deal with these.

For financial reporting and internal controls, we have in Taiwan strict insider trading rules; and, of course, a lot of NYSE requirements.

Last, but not least, in recent times, we've had to deal with conflict minerals. Through several tiers of brokers/consolidators, we buy a lot of rare minerals for use in our manufacturing process. You would be surprised at the types of metals and minerals that go into semiconductor manufacturing. We use most of the rare minerals in the world in that manufacturing, especially in advanced technologies. We will be filing later this year with the SEC, conflict-free statements under the SEC requirements. We have teams of people led by the Legal Department in all of these and similar compliance areas, but we try to spread out the responsibilities within each organization, whether it's H.R., Operations, or Procurement.

We have a very strong compliance/risk management approach, including a committee that handles risk management. It reports to the Audit Committee once a quarter, at each one of our meetings. In fact, for all of these areas I report to the Audit Committee and then that report is given to the Board by the Chairman of the Audit Committee.

We have a very proactive training program, and we have a very extensive interactive legal website which we created ourselves that has all this on there. Our worldwide employee base of 40,000 people can access it as an intranet site. We also participate in different international organizations, particularly through the Taiwan Semiconductor Industry Association, which is the equivalent to the U.S. SIA [Semiconductor Industry Association] in Washington, D.C.

With respect to trade secret management, we view this as the most important intellectual property management responsibility. We are an innovation company. We spend eight to nine percent of our gross revenues each year directly on R&D, and then a lot more goes into other areas of innovation.

We've had a trade secret policy since 1999, and that's gone through many changes with my work. People like Brian Ferrall have helped us revise it as we litigate more in this area to protect our technologies and to figure out how to make this policy work even better. We have six core strategies in the company that Chairman Morris Chang established. Trade secret protection is one of the six corporate strategies, and I head up that strategy.

Altogether, we have two organizations that are responsible for protecting trade secrets on a daily basis, one which is actually under H.R., but the head of it reports to me. The other is in Information Technology. Altogether we have 400+ people who are

focused on protecting our trade secrets. We've been involved in legislative reform in Taiwan, which once had a very archaic trade secret law. Then we took the approach to have four different trade secret reform initiatives phased in, one after the other. The first two, we got all the legislation passed, which also makes theft of trade secrets a criminal offense. Now, we have gotten passed by the Legislature the ability to monitor under certain cases to protect our trade secrets. Some of the plaintiffs' bar would love to hear this; but we are also on the verge of getting limited discovery to help us prove cases. Previously, there was no discovery, and it was very difficult to establish trade secret theft without it.

As we found in the SMIC case, when somebody hides the theft in metadata, when we were able to get discovery and get into the metadata, we were able to even more convincingly present the case.

We have teams throughout all of our fabs and the manufacturing processes to capture new innovation that comes out. Last year we had 3,000 cases, and as you saw on the last slide, we presented an annual Golden Trade Secret Award. Not only do we recognize patents, good patents, and golden patents, but we recognize what we consider to be "Golden Trade Secrets," under an approach that all the operations and R&D actually nominate and approve.

On this next slide, we have tracked external organizations. Our tool vendors and suppliers posed a real problem over the years; as a result, we audit them. Basically, we don't allow any USB, cameras, removable media, discs or anything, into our facilities. It's all strictly controlled and monitored. I can answer more questions on that going forward.

Regarding our patent portfolio, we've taken our patent program and made it best in class. This past year, we filed over 2,000 U.S. patent applications; we could have probably filed 3,000 or more, if I had the budget to do it. In 2013, 940 patents were issued by the USPTO, whereas when I joined the company, we were receiving about 350 a year. A tremendous amount of work was done internally with our legal team; we have 30 people in the I.P. Department, along with outside counsel, to help us in that area.

What's been the real challenge for us, and most corporations these days, are the patent lawsuits, not by operating companies but by non-performing entities, or what some people refer to pejoratively, as "trolls." This is a growing challenge for us, particularly when most of the patents that we see asserted against us are not good patents, suffering from serious invalidity issues. You will hear the speakers talk about the *inter partes* review process, which we're using quite extensively to challenge those bad patents when they're asserted, which means we go after and try to invalidate the patents under the AIA.

We do fight, and we also use other approaches, such as membership into patent aggregators, known as RPX and AST. We've used them very successfully.

I'll finish there and turn it back over to Jack and the panel. It is a lot to go through in a short period of time, but thank you for listening and for viewing the slides.

JACK FRIEDMAN: I would like to ask a question or two of Dick. One of the interesting issues that global companies have is whether to list in the U.S., Hong Kong, London, or other markets. What is the impact of listing on the New York Stock Exchange for a company in Asia?

DR. RICHARD THURSTON: Approximately 75% of our customer base is headquartered in the U.S., and so we feel that it's important for a number of reasons. One of those important reasons, which is also a reason why some companies delist, is that we have to meet very strict standards, whether it's corporate governance, Sarbanes-Oxley — all those things which the SEC and which the NYSE have. Our customers like that, because it shows that we are a world-class global company; that we are conforming to rules and regulations with which they are familiar. Not many people are familiar with Taiwan and what Taiwan Stock Exchange does. It does make available to us the funding resources, especially in New York City, which is still the top-funding center of the world. As you can see, we spend a huge amount of money — I didn't mention this, but if you looked at the capacity figures, CAPEX alone, for new tools and manufacturing each year, averages around $10 to $12 billion, which we have either self-funded or, in the last couple of years, gone out to the markets, and so that's very important, too. Believe it or not, it's the credibility, and it's the abiding by rules and regulations that people are familiar with that makes listing important.

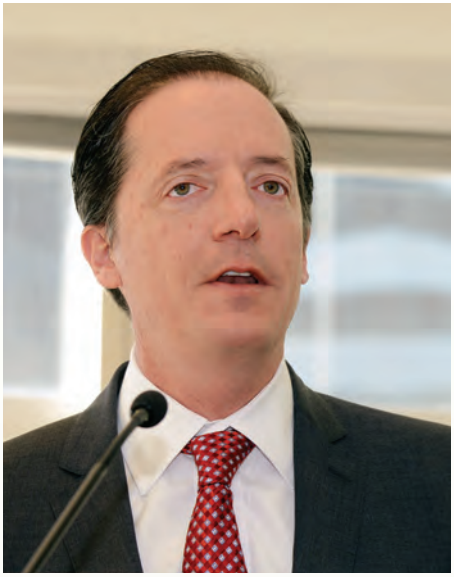
JACK FRIEDMAN: Even business people in the United States or Europe have images of how Asian business is done, or the idea that it's always controlled by one family. What are some of the things you have been exposed to or discussed with people, which show how in the West they really don't quite understand how business is conducted in Asia?

DR. RICHARD THURSTON: The point that you've raised about family businesses is a challenge. We find it is a

challenge dealing with a lot of companies. Increasingly, the major companies that we deal with are governed by government rules and regulations, whether they're publicly or privately traded, and we're finding a lot more compliance. Over the 12 years that I've been there, I've found that the internal control systems of Taiwan companies have improved significantly. In our own M&A deals/due diligence, we are still very concerned about what is really being reported; what is hidden behind the surface; are there double books and records? China is still such a morass that we really don't want to get into M&A activities at the present time.

Increasingly, what we've found is that Taiwan companies are becoming more "rule of law" oriented. When I joined TSMC in early 2002, there were only a handful of Taiwan companies that had any General Counsel, let alone legal office. Or where they had a legal office, most of the time it reported in to the CFO. That environment has changed. I'd say most Taiwan companies today — and Asian companies, generally — have General Counsel or that equivalent and their own legal organization. Part of it is the result of the significant growth of litigation against Asian companies in the patent area, and other areas like regulatory compliance and antitrust. A lot of Taiwan companies have gotten caught up in antitrust price fixing arrangements and litigation. They've had to learn the painful way. Regulatory compliance is forcing companies to be more robust in doing business. I've seen a very positive development which often is not captured. You hear people criticize rule of law, and even in Taiwan, sometimes — especially when I'm driving my car — I say, "Where is the rule of law?" Because there are few people who follow any of the traffic lights and the rules! It has improved. There still are challenges, and it really is in the due diligence, where you do an M&A; what are you really buying.

JACK FRIEDMAN: There is one more question. Can you tell us about your chairman's background? You said he's 83 and very dynamic and active?



DR. RICHARD THURSTON: He was born in China before World War II. Before the revolution, his family moved to Hong Kong. From there he went to the United States and studied for a time at Harvard, and ultimately earned a Ph.D. from Stanford. He worked for Texas Instruments for nearly 30 years; went on for a couple of years at General Instruments, and then was invited to Taiwan in the mid-'80s to head up the government research organization called ITRI. During that time, he conceived of the approach of a foundry for manufacturing semiconductors. He took a semiconductor startup out of ITRI and turned it into TSMC. This was back in 1987 — and he's been running the company since then.

JACK FRIEDMAN: Thank you very much. I'd like to turn to our first Distinguished Panelist, who is Brian Ferrall of Keker & Van Nest.

BRIAN FERRALL: Good morning! Thanks, Jack. My name is Brian Ferrall. I'm a partner at Keker & Van Nest in San Francisco, where my practice is technology litigation. Despite the nature of my comments today, I'll affirm to you that I work both on the plaintiff and the defense side. I want to thank Jack and mostly Dick for inviting me today. Given the scope of Dick's comments and the scope of what Dick has done at TSMC, there's a huge range of things that I'd love to talk about in the brief time here, in particular on the trade secret front.

I'm going to take a different spin and talk about the patent system and what I think is, perhaps, the most important question that companies like TSMC and the companies that you represent should be asking about the patent system. In some ways, Dick's comments about trade secrets raised an interesting point, in that the focus that TSMC has placed on trade secrets is the ying to the patent yang, if you will. After all, by opting for trade secret protection, you're essentially opting out of the patent system. That, of course, makes sense for a lot of technologies, no matter how good the patent system is. I want to pose some questions for the group about our existing patent system, and whether it's really working.

I will start with first principles. The patent system that we know is based upon a single clause in the Constitution that says Congress shall have the right to pass the patent laws "to promote the progress of science and useful arts." I don't think anyone will really question that giving an inventor exclusive rights to an invention encourages innovation at some high level. Our patent system has evolved very dramatically and rapidly over the past 30 years in ways that I'm not sure anyone predicted when some of those changes were implemented 30 years ago. We need to step back and continually ask ourselves, "Are we still consistent with the purpose of the patent system as articulated in the Constitution?"

The question I pose is, "Is our patent system today doing more harm than good for innovation?" Now, I'm not the first one to have asked this question, by any means. In particular, I go back to a book that was published in 2006 by two professors at Harvard Business School. You may be familiar with some of them — Adam Jaffe and Josh Lerner are some leading thinkers on innovation and innovation policy. They wrote a book in 2006 called *Innovation and*

Its Discontents. What they focused on is indisputable: that there were two changes that occurred 20 to 30 years ago that have led to some dramatic changes in the patent system. They were not changes in the fundamental substantive patent law; they weren't dramatic Supreme Court decisions that overturned centuries of precedent; they were actually administrative or ministerial decisions taken by Congress.

One was the establishment of the Court of Appeals for the Federal Circuit, which took the entire appellate process for patent law out of the hands of 11 regional circuits and concentrated it in one circuit court alone. Except for the three to four cases that the Supreme Court might take in the field of patent law every year, all patent law was going to go through this one body of jurists.

The second thing was the change in the funding system to the Patent Office that occurred in the 1990s, where Congress decided that the Patent Office would be effectively self-sustaining. At least that was the goal: that it would earn its keep by fees charged for patent applications and fees charged, in particular, to people who were awarded patents. One might say, perhaps a bit cynically, that the Patent Office suddenly was in the business of granting patents, not in the business of doing the public good or determining whether one is entitled to an invention. They needed to grant patents to stay in business.

Professors Jaffe and Lerner capture the essence of the question here in a single sentence, and I'll quote it to you. They say, "However complex the origins and motivations of these two Congressional actions" — that's the establishing of the Federal Circuit, and changing the patent funding — however complex those origins, "it is clear that no one sat down and decided that what the U.S. economy needed was to transform patents into much more potent legal weapons while simultaneously making them much more easy to get."

It's fair to say that that was not what Congress had in mind when they passed these two things. You may question today whether anyone has really taken a look at the policy implications of what's happened over 30 years. Now, when they wrote the book, they cited a number of examples of reasons why the patent system may be, to use their words, "more sand in the machinery of the U.S. economy than grease in the economy." They pointed to the explosion in the number of patents. It's gotten even more so since then. For example, in 1995, 100,000 patents were issued by the Patent Office. In 2003, 150,000 patents were issued — a 50% rise. In 2013, now: 250,000 patents issued from the Patent Office.

Now, in 1995, I was a pretty young lawyer, and I was naïve. I didn't know a lot of things that I know now, but I don't think, as a society, that we are two and a half times cleverer than we were in 1995. There are countless other things that we could point to. Dick mentions RPX and AST, which are both very effective for what they do. They involve millions of dollars, and companies like them involve, ultimately, billions of dollars of money that goes towards protecting yourself from patent litigation. You've got single companies investing multiple billions of dollars just in patent portfolios. Think of what else that money could go to, investing in engineers or in R&D. Coming back to the Constitutional provision, are we promoting the progress of science and the useful arts with a system that forces companies to spend billions of dollars on what are essentially a stack of legal rights that might not actually be advancing the progress of science?

Let me just speak a moment about patent reform, and then I'll sit down, because there's lots more to talk about on this. There have been efforts, certainly, to address problems in the patent system, and we've heard about those, and some have passed. You've got the America Invents Act that passed a couple of years ago. All the panelists are going to talk about *inter partes* review systems, to weed out faulty patents. That could well be effective. I question whether again, from a 30,000-foot level, if you have a system that doesn't seem to be meeting the policy goals of the economy, does it really make sense to put another structure on top of it to correct the errors that happened originally? Or does it make sense to try to get to those errors in the first place? That's something that Congress should be looking at.

Congress is absent in this debate, because, I would propose, it's a very sensitive and difficult topic for Congress to attack. Instead, most of what you see in patent reform is nibbling around the edges. Attacking the most egregious litigation behavior — and that's good — but no one is taking the questions that Jaffe and Lerner posed some seven or eight years ago, sitting down with academia, doing empirical analyses, trying to really figure out: are we doing more harm than good?

I raised the question and I wanted to talk about it because companies like TSMC, companies that you represent, are really the best hope for forcing Congress and the Administration to take the hard look that they should be taking at this important issue. Thank you.

JACK FRIEDMAN: Thank you very much. Our next Panelist, Woody Jameson, is with Duane Morris. Dick was with him when he was in private practice. I'd also like to mention that Dick was a partner at Haynes and Boone, whose partner will be speaking later.

L. NORWOOD "WOODY" JAMESON: Thank you. Yes, my name is Woody Jameson. I'm a partner in the law firm of Duane Morris. I head up the firm's I.P. Litigation Group. We have had the great fortune to be a partner of TSMC for a number of years with respect to their patent prosecution work and patent litigation.

The issue that I wanted to tee up for you in the next five minutes is one of these real-world conversations that either Dick would be having with perhaps Dr. Chang, or I might be having with Dr. Chang one day. It follows a real-world hypothetical, which is: A company is developing a blockbuster product; it has every confidence that it's going to be successful in the marketplace and that it's going to substantially impact the competition. You're in the chairman's office, and the chairman is asking you, as the lawyer, "What's in store for us down the road, from an I.P. perspective? What's the landscape look like?"

Before we get to that — and Dick already hit on this — the first issue that you at least need to be thinking about is, if I've got this valuable I.P., am I going to protect it as a trade secret? Am I going to protect it as a patent? Or am I going to try to figure out how to balance that and do both? There are a lot of good reasons to go down both roads.

I'm going to talk a little bit about the notion you have to have a patent portfolio. If you're a big company, you have to have a patent portfolio. The best reason why is — for all of you who have been following the Samsung/Apple wars — could you imagine having been either Apple or Samsung and not having had a patent portfolio to fire back at your competition? You would

be basically a defenseless company in that situation. That's one thing you have to be thinking about.

Going back to this conversation with somebody like Dr. Chang, I'm going to have to start with something along the following lines: bad news and good news. Let's start with the bad news. You're going to get sued for patent infringement. If you've got a successful product in today's world, you will be sued for patent infringement; it's an absolute given. Then the followup question: "Who's going to sue me?" More bad news: I can't tell you who's going to sue you; I just know you're going to get sued.

Now, on the competitive front, that's an easier investigation point, because you know who your competition is. You likely know what their corporate philosophy is with respect to litigation. You may have a pretty good feel for that. It's the issue that Dick hit on — what's going to happen on the non-practicing entity front? The answer is, it's almost impossible to predict.

The slides that we have prepared show the fact that products are becoming increasingly complex. This is an Apple iPhone. What the slide really shows is, these products had GPS, Wi-Fi, Bluetooth, various micro-electronic chips, photonics, cameras. The number of patents that potentially apply to any one of these products in today's world is not just the thousands; it's the multiples of thousands of patents. This gets to the very issue that Brian is raising about whether or not the patent system is broken. How can there be multiple thousands of patents that can potentially apply to any one of these products? By definition, if there are multiple thousands of patents, who is going to enforce them against you? It is a very difficult conundrum. That's the bad news.

What's the good news? The good news is, in the grand scheme of things, the law has actually been changing dramatically over the last two or three years to put companies in a better position to fight these patent cases. We talked briefly about the America Invents Act and the patent reform that has led to this new thing called "*inter partes* review." With it you can actually challenge patents in the Patent Office. Hopefully, it is going to be a much more efficient way to challenge and perhaps kill the patents in the Patent Office. Meanwhile, you have to move to stay your litigation that has been brought against you while that procedure goes forward. That's one issue to think about.

The other good news front for your chairman is that damages law is really changing. The Federal Circuit has recognized that every plaintiff coming forward with a patent and telling TSMC that they owe tens or hundreds of millions in damages in every case isn't right. Whatever creative theory a damages expert can come up with, we've got to do something about that. The Federal Circuit, over the last couple of years, has issued a series of decisions that have eliminated this thing called the "twenty-five percent rule of thumb." They stated very clearly that the "entire market value theory is the exception and not the rule." In that when we are looking at patent damages, we really do need to drill down into the patent to figure out what is innovative about the patent. What does it really cover? Typically,

in today's world, by definition, it's going to be a teeny, tiny thing. No matter the product they're being accused of infringing, that's a valuable development for us.

Also, in the non-practicing entity front, you really don't have the risk of an injunction any more. That was always a huge issue for companies. There is nothing worse for a company than the threat of an injunction. That obviously still exists in a competitor situation, but it's almost non-existent in the non-practicing entity situation.

That also gets back to the idea of why do you need a patent portfolio? In a competitive situation, if you can demonstrate that you are actually practicing a patent, it is going to increase the leverage you may have against your competition if you decide you want to go after them and perhaps get an injunction.

Those are, at a very high level, some of the issues you need to be thinking about. Then the final issue that I will leave you with before I sit down is: What's the corporate philosophy going to be on non-practicing entity litigation? Are you willing to buy them off? Or will your corporate philosophy be, if we're right on the merits, we're going to fight to the death? If it is the latter, it almost means, by definition, you need to be thinking about, on the front end, major budgeting. In today's world, we're not talking about *a* lawsuit or a couple of lawsuits for these big companies. You're talking about, perhaps, 25, 50, 75, 100 lawsuits at any given point, brought by non-practicing entities. That is a huge expenditure of money if your corporate philosophy is, "I'm going to fight to the death if we're right." Thank you.

JACK FRIEDMAN: Thank you. We're going to have one more speaker on the litigation/regulatory side, who is David O'Dell at Haynes and Boone. Then we're going to move on to some corporate dealmaking/money-oriented issues with our remaining speakers.

DAVID O'DELL: Thank you, Jack. My name is David O'Dell. I'm a partner in the law firm of Haynes and Boone. I currently work in Dallas, but I spend a lot of my time in Taiwan and other places. Dick, when he was presenting, talked about some of the changes that he helped bring in at TSMC in the Legal Department. He showed you the numbers, but there was quite a fundamental change of concept that occurred when Dick came in. There were many changes. One of which, that I was involved with, is the protection of intellectual property. Dick came from T.I., which has a very strong reputation of protecting its intellectual property. Dick brought that, and brought advances even to that.

There are three primary assaults related to patents. One is a pure theft of I.P. Dick, Brian and others have referred to the *SMIC* litigation, where there was pure thievery of intellectual property from one company to another. That happens. To protect yourself, you need a good and strong patent portfolio. Without question, TSMC is a technology leader. I don't think anyone would deny that. When Dick came in, I don't think that their patent portfolio corresponded to the strength of their technology. Dick has worked with his group, and they have a very high level of overview that we have worked with, and others have worked with, of improving the quality of their patents and protecting against theft of I.P.

Another area of assault related to patents is general cross-licensing. These are competitors — smaller or larger — that will come and want to cross-license technology.

Another area that Dick has worked hard with and on which I've been very involved, is what I call "aggressive licensing." These are very technical, legal negotiations over a period of time to set the values of each company's portfolio, and not quickly acquiescing or falling to whatever the number is that the asserter is coming up with, but a true valuation of intellectual property on both sides, and setting the right number.

The third primary assault — and this is something that Woody and others have been talking about — is from the non-practicing entities. These are companies that just have patents that they are asserting against the company, and there's no space for cross-assertion, because they're not practicing. They are often just patent holders. That has now become one of the biggest issues. In many ways they are unfair, because there is a lack of reciprocity that can go on. Until the patent system is reformed — and I enjoyed Brian's discussion on that — one of the strong tools that we have is *inter partes* review. That started on September 15, 2012, and there's been between 500 and 1,000 IPRs that have been filed. Many fewer of those have issued. I'd like to tell you about those and what's involved, and some of the statistics that have been happening with the IPRs.

An IPR was meant to replace something called "*inter partes* reexamination." *Inter partes* reexamination had two or three big complaints. One was the ability of a third

party — not the patent owner — to challenge the validity of a patent before the Patent Office. It took about three or four years to complete, and that was way too long. Courts were not granting stays; the issues were resolved by then. Also, there was no discovery; there were no depositions of expert testimony. Thirdly, in *inter partes* reexamination, because it was an examination, people were able to change their patents almost freely. Because there was a dispute going on, they would amend their patents and their claims to cover your product.

The first two were addressed head-on. The *inter partes* review now takes about a year and a half, or less, to complete. Because of that certainty, the courts are granting stays. If there's an ongoing litigation, the chance of getting a stay in the litigation held is stronger. Also, there's a limited amount of discovery — not the type of discovery that Woody faces every day on litigation — but a small amount of discovery, especially directed to experts.

Third, the ability to amend, although it's in there, I am not aware that anyone has successfully amended their patents in IPR, and I don't think it's a viable solution. There is a mechanism which we have tried without success, and others have tried without success. It's good if you're initiating the IPR, because there is less of a concern that it will happen.

One of the details about IPR is the cost. I believe that some of the I.P. economic evaluators are averaging around $200,000 to $300,000 for an IPR. Now, if you're involved in statistics, the numbers are way too low. There have been relatively few that have completed, so the numbers will get better as time goes on. That's a good ballpark in what we're seeing. I'm currently involved in about 20 of them, and that seems to be a number that's consistent with what we're seeing.

Another thing is: how trivial is the discovery? Is everyone going to come and take, as in litigation-style discovery, whatever they can find in your files and do that kind of

discovery? The answer is no. The Patent Office has basically limited discovery to the deposition of your experts and any other people who have inserted themselves in the proceedings. It's not limited to that, but that's the most common kind of discovery that's happening.

Thirdly is the result. How are the results coming along? This is really going to support Brian's theory, and the two professors from Harvard's theory, is that the results are overwhelming. The patents are being invalidated at the Patent Office through this procedure. Recently, about two or three weeks ago, they started having some patents survive IPR. By and large, these IPRs are successful at eliminating patents. From my personal experience, when we advise clients (like TSMC), we don't file IPRs where we think we're going to lose! The IPRs are being used to weed out and invalidate bad patents, by and large. People are not going through the time, money and expense of an IPR on a poor chance of success. You do your diligence before. Are we likely to succeed in an IPR? If our chances are good, let's go forward, and it's a good success. It's been a great tool, because it removes this patent from this entity that they've been asserting against you and other people. Also, you have the ability to settle an IPR and stop it. As a negotiation point during the proceedings you can say, "Look, if we agree to settle the case, I'll end the IPR." When they say the damage is done because the IPR filing was filed, and other people could almost pick it up, they would file their own IPR.

This is a tool that TSMC, according to public records, has used. It is part of Dick's strategy at TSMC, and has been a very strong and aggressive one. He wants to be aggressive back and it's been successful. You can see from the IPRs that TSMC has — and you can search for TSMC IPRs — and they've had a lot of success there. Thank you.

JACK FRIEDMAN: Thank you. We'll move to the dealmaking side in a moment. First, I wanted to ask Dick a question. In the R&D area, if you looked at the Hollywood movies from many decades ago, a laboratory would have a Bunsen burner, beakers bubbling, and a little smoke. That was the image of R&D in Hollywood movies. Then you move forward, and you have the James Bond-type movie where people are stealing formulas and secrets. Suddenly you go in, and it's all white. There are people in lab coats in front of computers all the time. What do people do with R&D?

DR. RICHARD THURSTON: It's multiple-faceted. The majority of it is done at a computer workstation, designing and analyzing. There is the element where they do actually have a physical lab, but that's when you're dealing with materials.

Our business, also, is very heavily involved with materials and materials science. Also, there's the R&D that takes place on the manufacturing floor, especially as we're moving from the laboratory to manufacturing. Now that's the James Bond environment, too. You wear all white smocks, it is a very clean environment, and many times more clean than a hospital is. We do all elements of that.

We also have a number of strategic partners — a lot of universities — that are doing other research in their laboratories. Most of it, today, in one form or the other, is computer-generated. It's just like our manufacturing facilities when we're producing all these chips. The twelve-inch facilities are all automated, and we're probably at 99% automation. We're producing millions of chips out of a single facility with largely no people on the manufacturing floor; they're all monitoring computers. They have a troubleshooter if there's an issue. Also, it is very much a James Bond type of environment. The security protocols in our most advanced state-of-the-art fabs — we do have biological, biometric — include all sorts of stuff that is built into the security.

[AUDIENCE MEMBER]: Before you move on to dealmaking: other than the IPR tactic that has been discussed, to what extent has the AIA resulted in changes to patent portfolio tactics and defense strategies?

DR. RICHARD THURSTON: The biggest aspect of the change in our tactics in the U.S. involves the AIA change to "first to file," rather than the "first to invent." I had been planning on that for years, and Congress took so long, so we were well-prepared in how we capture the inventive act or the innovation at the very beginning, and then process it.

When I started at TSMC, believe it or not, the average cycle time from innovation to filing was 365 days. You would never get anything under the AIA with that time frame, so that had to change. Today, our average is less than 100 days from date of innovation to file.

We also have been working more closely with the inventors on actually targeting what is it that we want to invent. We're talking about the need to be strategic, because we're now talking about a 10-year process. If you look at manufacturing at full volume, 28 nanometer semiconductor devices, we now are ramping up in 20 SoC (systems on chip). Within a short period of time we'll be producing 16 nanometer devices. We already have been testing our 10 nanometer and we're doing research on 7. We have to be planning the patents for all that and getting them out there, because our competition are also spending a lot of time.

With first to file, IPRs and the ability to challenge patents, we're making sure that the quality, and the quality review, is robust. David O'Dell, when he first joined, found and actually fired law firms that were doing patent prosecution, because the quality was poor. Even the English language was poor. We got what we paid for. We only would pay for maybe $2,000 per patent application to be filed in the U.S., and you can't buy a year's supply of toilet paper for that.

The AIA has really changed that and we've focused on quality and cycle time. Also strategic, deciding what it is that we want to patent, what we don't want to patent.

JACK FRIEDMAN: We'll take one more question.

[AUDIENCE MEMBER]: Have you reviewed the Chinese patent system and observed changes in terms of filing patents and enforcing them?

DR. RICHARD THURSTON: Yes, I see it maturing. When I was at T.I., I was involved in helping to advise them, and other U.S. companies, on creating a Patent Office and the process. At one time, we didn't file any patents in China. We've found that, today, the quality of the review is very sophisticated in China's patent office, with a very sophisticated patent database.

Increasingly, we're discovering prior art around the world. Korea has been one of the best — China is picking up. If you look at countries in which we file patents, China is number two, because that is where the future market is located. Yes, there are concerns about trade secrets, but that's more on the manufacturing floor, and we have been involved in litigation. Even as a defendant — in the *SMIC* case that you've heard, they sued us and we got a very strong defense judgment in our favor. It's like everything — there are good courts and there are bad courts; there are good judges and bad judges; and you get to know. On the politically high-profile case, you want to try to keep it from getting there. We were able to do that in our case, but then you may have some issues. I'm finding the quality of the judges, the training that goes on — especially coming from here in the United States — there is a very strong exchange program. John Marshall, in Chicago, has a very good program with the PRC patent office: China sends a lot of examiners there each year for training.

JACK FRIEDMAN: By the way, I had the privilege of interviewing, in the 1970s, the CEO of Texas Instruments regarding a government study on innovation. He said that internally, the biggest challenge for top executives was getting research, manufacturing, and marketing people to work together because they had their own orientation.

DR. RICHARD THURSTON: Most of our marketing is really technology marketing. We work very closely, in our strategic portfolio development, with our technology marketing folks, with operations, and with

R&D. We have a group that we look at to discover the trends, especially since we're trying to look ten years out.

JACK FRIEDMAN: Let me thank you. Next, Scott Cohen of Jones Day and Kit Kaufman of Latham & Watkins are going to talk about various corporate and dealmaking issues.

CHRISTOPHER "KIT" KAUFMAN: I'm very happy to be here. We're the host firm, and it's great to see all of you. I'm also blessed to be the only one who doesn't represent the company involved here. In fact, in the past, I've represented, now less-fortunate rivals of this company! I can tell you that TSMC is the 800lb. gorilla of this industry.

Scott and I are going to talk about something different, which is corporate dealmaking involving a U.S. company and a foreign company. We're going to start with the fact that U.S. corporate taxes are high by worldwide standards, quite high. There are a lot of other places where people can incorporate with lower corporate taxes; including, ironically, countries like the United Kingdom, Ireland and the Netherlands, which you don't think of as tax havens, but compared to the United States, they are tax havens.

When you're doing an acquisition, one of the interstitial benefits that is possible if you're acquiring a foreign company is to use that opportunity to set up a holding company in one of these tax-free jurisdictions. There have been quite a significant number of these transactions recently. It has not gone unnoticed by our government, but they range from Omnicom/Publisys, to the transaction that Scott was heavily involved in, the Tokyo Electron/Applied Materials transaction, which is a $9.34 billion transaction (I got involved in the Applied/Tokyo Electron transaction representing some investment banks); Endo Health Solutions/Paladin, $2.9 billion; Perrigo/Elan Pharma, $9.5 billion; and I could go on and on. These are all multi-billion dollar transactions where, often in

connection with the acquisition of a foreign company, the holding company changed to a tax-favorable jurisdiction.

What do you have to do to pull this off? One is, the acquisition will have to be, as we'll discuss in more detail, a significant company compared to the acquirer. You're not going to be able to go pick up something five percent your size and use it as an excuse to change your jurisdiction of incorporation. There needs to be a compelling business rationale for the combination that really is attractive to the capital markets. There are a number of structures involved, mergers primarily, relating to the U.S. company, but as Scott will show you, it can be more complicated. The new holding company is usually tax-resident in a jurisdiction outside the United States because of U.S. corporate tax rates. However, often, it may not be actually tax-resident in the jurisdiction in which it's formed.

The slide shows a basic U.S. structure for a U.S. company, and you've all seen this. There is a U.S. company, generally a Delaware corporation, and a bunch of subsidiaries. They may be foreign subsidiaries. The goal of one of these inversion transactions — and that *is* the term of art — they're referred to as "inversion transactions." Of course, the U.S. company is no longer the holding company, no longer the company from which the shares are issued. The goal is to have the issuer in a more tax-friendly jurisdiction.

There are two ways, ostensibly, to do it; only one of them works as a practical matter. You can reincorporate in an area where you already have substantial business activities. Generally, that won't work, so the one that's bolded on the slide is the one that most people use, which is the U.S. company must combine with an existing and unrelated business in a transaction where the U.S. company shareholders get back less than 80% of the combined equity. Remember, I said you can't use a tiny acquisition to pull this off. The market is not going to allow you to buy a company that's big enough if it isn't any good in order to meet these rules, to change to a foreign holding company. You have to have two things: a big enough company and one where you have a real business story to tell.

The slide is what we normally look at on the "before" aspect of it. The U.S. company on the left, the foreign company on the right, and here's what you want to look at afterwards. There's a new foreign holding company; the legacy foreign company shareholders and the legacy U.S. company shareholders are both shareholders of *that*. You're trapping the U.S. company taxes over on one side of it, and able to move forward.

Here's the rule — and this is not going to get technical — but if the legacy U.S. company shareholders own more than 80% after the deal is done, the transaction won't work. If they own more than 60% but less than 80%, the transaction will work, but there will be other restrictions that are not wonderful. How do people deal with that? There are — and I love the nomenclature here — for the U.S. company, what are referred to as "dieting transactions," which means getting rid of things and skinnying down. For the foreign company, there may

be "stuffing transactions," where you add to the foreign corporation and there may be a variety of capital structure changes as well.

This slide shows the long-term benefits. You are looking at what it should look like after the transaction. You should have tax-efficient leverage; you should be able to plan for foreign growth; you're going to be able to move money around more successfully; and, of course, you're not going to be burdened with the 40% tax rate on everything. When a U.S. company purchases a foreign company and puts it under their mantle, any money that comes up to the U.S. company is going to be subject to that tax rate.

That's the simple version, the first 12 pages. There are 30 pages in the slides which deal with what jurisdiction you would choose, what the stock market effects of it are, where you would list, and a whole variety of other things. Now Scott's going to do a real-world example — one we both worked on. Thank you.

SCOTT COHEN: My name is Scott Cohen. I'm a corporate partner with Jones Day. I've spent the last two decades following Dick around from place to place, and I can tell you it's been a very effective business model. What I'm going to do is I'm going to walk through the Applied Materials/Tokyo Electron transaction very briefly, just to give some context to what Kit's been telling you.

Applied Materials is a very large U.S. company; Tokyo Electron is a very large Japanese company; and they are two of the premier manufacturers of semiconductor equipment in the world. The point I would like to make is that there's a lot of talk about inversion transactions; it's true that there are tax benefits that are realized from these transactions, but all these transactions are driven by compelling strategic rationales. You don't do a deal this size just to achieve a tax benefit.

Here's some data on the two companies. You can see that Applied is incorporated in Delaware; Tokyo Electron is organized

in Japan; but in this transaction, we'll be creating a holding company in the Netherlands that will own both Applied and Tokyo Electron. There were a variety of reasons for choosing the Netherlands, only one of which was tax.

This is a merger of equals transaction, meaning that leadership is shared between the two companies. There are a few things that come from that. They're going to have two dual headquarters, in Santa Clara and Tokyo, post-closing. On another slide, I'll point out that the leadership actually comes from the two companies.

It's a large transaction. The combined market capitalization for the two companies is $29 billion. The holding company will be listed on both the NASDAQ and the Tokyo Stock Exchange post-closing. After the transaction, they'll have 27,000 employees, a very large patent portfolio, and annual revenues of $12.6 billion.

In getting to the strategic rationale, there are two bases that drove this transaction. One is, the two companies have very complementary products and technologies, as you can see here. Putting those two together made a lot of sense from a business perspective, and it should further accelerate innovation to the benefit of customers and consumers.

There are also a number of operating synergies that will be realized from the combination, which we'll get to on another slide. If anybody's interested in chemical vapor deposition, Dick would be happy to talk to you after the presentation.

Again, the strategic rationale — you put two companies together to make one that is stronger. That includes the combination of their technologies and the cost benefits that can be realized going forward.

The transaction highlights, we've already discussed. It's an all-stock transaction that creates a new holding company with a combined market capitalization of $29 billion. The Applied Materials stockholders will own about 68% of the stock of the new company; the Tokyo Electron shareholders will own 32%. That complies with the 80% test that Kit referred to.

As you'll see, they expect to achieve $250 million in annualized run rate operating synergies very shortly after the transaction closes, increasing over three years to $500 million a year, which is considerable. There are other benefits that they will realize in savings; one of those is tax.

Applied modeled their overall tax rate previously at about 22%; the new structure could reduce their effective tax rate to a level more in line with their international competitors, which is significant. They expect this transaction to be accretive to EPS after the first full year following the transaction.

The next slide goes to the shared leadership, again — the dual headquarters, dual listings, and the incorporation in the Netherlands. The leadership team comes from both companies. The Board of Directors will consist of five directors who come from the

Applied board currently, and five who come from the Tokyo Electron board, and then one independent will be chosen jointly.

This slide presents a very simplified version of the transaction structure. What you'll see is that Applied becomes a subsidiary of the new holding company through a reverse triangular merger, and Tokyo Electron becomes a subsidiary through a stock exchange transaction.

Here's the final organizational structure — again, very simplified. If you saw the full structure, it would blow your mind. That's what happens when you let the tax guys do it.

That's basically it. When you do these transactions, you do them for business reasons. Then, when you go to structure it, you consider the tax aspects and in doing that, you have to decide on a domicile. Unfortunately, the United States simply is not currently an attractive domicile. The tax rate is too high; they tax worldwide earnings; cash gets trapped outside the U.S. and it can't be returned to shareholders. That's driving these inversion transactions as we go forward.

There has been a recent proposal in the last budget to change the 80% test to a 50% test, which would mean that going forward the U.S. entity would actually have to be the smaller of the two combining entities, from a value perspective, which will certainly make these more difficult. The question is, "Will that actually pass?" It is unlikely.

The better approach would be to reform the U.S. corporate tax structure system, and it remains to be seen whether we can ever get that accomplished. Thank you.

JACK FRIEDMAN: Could I ask a quick question? I assume that when you do a large M&A deal, there must be many countries, regimes and regulations involved. How do you organize your team? Do you have law firms in each region that cover that region or one law firm for the area?

DR. RICHARD THURSTON: Right, it could be 50. Generally, we'll have one core firm, like Jones Day with Scott Cohen. Scott, actually, has been providing M&A advice for me and companies with which I have been associated since 1990. I've known Scott and worked with him closely. We'll try to have one core firm that helps with the deal structuring. Then, of course, you have to rely on local firms, and when you have 40 or 50 you have all sorts of regulatory approvals and you have to track that. One deal Scott and I did, we had 47 different countries we had to work with.

You look at the local countries, and of course, a lot of deals are going to be more about labor laws, approvals, and unions; it's not just tax. The whole thing can get complex. It takes internal management, in-house people managing it a lot more. Then if you're on the acquiring or the selling side, there is a transition plan, which is what I tend to have the in-house team focusing more on.

JACK FRIEDMAN: Scott, does it sometimes happen that your fiercest law firm competitor in a particular market or practice area, could also be someone on the same side of the transaction as you?

SCOTT COHEN: Certainly, in these transactions, in each jurisdiction you want the best representation that's available. Sometimes that'll be your firm, and sometimes it'll be another firm.

For example, with this transaction, we're handling a number of jurisdictions, but not all jurisdictions, and specifically, we have a large Tokyo office. The right firm for this transaction was Nishimura & Asahi, which is a very good corporate firm. We worked together very closely in this transaction; it was a very cooperative undertaking.

JACK FRIEDMAN: I'd like to ask the litigators about representing different companies who have a joint interest on a piece of litigation against a common plaintiff.

If you are competitors for other business, when you litigate together is it difficult to smile and work together?

BRIAN FERRALL: I was just thinking, when you asked the question — I have personally worked with three out of the firms here, and I know my firm has worked with Latham. Every firm here has worked with my firm on one or more matters, and I'd say we all get along well. It's not hard to smile working with these guys.

JACK FRIEDMAN: Thank you. I'd like to ask Dick a few questions, and then open it up for the audience.

First, on the people side, a company like yours is not just technology; it's not just top management and products. Could you give us a sense of the type of employment or other issues that might come up in other parts of the world, but that are handled differently than it would be handled in the U.S.?

DR. RICHARD THURSTON: The biggest issue that we face related to our technology and to our trade secrets, comes down to non-compete agreements and confidentiality agreements. Those types of undertakings may be allowed and may not be allowed, based on the jurisdiction you're talking about. What we try to do, as a general policy, is enter into a non-compete

agreement and confidentiality agreement with all employees. Some jurisdictions, such as California, do not allow non-compete agreements. We have to structure something differently with respect to compliance with California law.

Other jurisdictions have a so-called "doctrine of inevitable disclosure." That can be used to keep somebody from working with a competitor. We deal most with those where non-compete or even non-disclosure agreements are enforceable. What do you have to consider in the way of additional compensation? Again, we build that into all of our agreements so that there is additional compensation paid for that period of time after somebody leaves your employ as an employee. That's not just part of your base salary. That's a key issue we face all the time.

The other big area that we're constantly dealing with, as all companies, is privacy law. Each state, each jurisdiction, is adopting their own privacy rules and regulations, what is protected and what is not protected. We spend a lot of time internally with that issue.

JACK FRIEDMAN: I would like to ask a personal question here. In the five minutes a month you have free for your own time, what do you like to do?

DR. RICHARD THURSTON: Gardening.

JACK FRIEDMAN: You have a garden at home?

DR. RICHARD THURSTON: Yes.

JACK FRIEDMAN: Do you grow flowers?

DR. RICHARD THURSTON: No, vegetables! They are all organic, non-GMO!

[LAUGHTER]

JACK FRIEDMAN: It is an enviable lifestyle. Let's take some questions from the audience.

> "TSMC is what is known as a 'foundry.' We manufacture semiconductor products for other companies. We have over 450 active corporate customers. Our customer base is over 700. We don't sell the end product; we sell the semiconductor chips — the brains that go into virtually every consumer electronics product in the world."
>
> *– Dr. Richard Thurston*

[AUDIENCE MEMBER]: On patent enforcement, when you're looking at trade secrets, what kind of information is patented?

DR. RICHARD THURSTON: We're a process company, largely process innovation. You can say reverse-engineer decap. Take a chip, for example, and look at the process used. There is that aspect of forensics. As I mentioned earlier, we use forensic analysis to look at metadata, to determine if someone has taken something. Have they changed it? Have they altered it? It's becoming more and more significant an element for our work. We have worked with companies outside that do that sort of technical analysis, as well. There are two Canadian companies — TechInsights and then Chipworks are the names of the companies we work with closely. Then we have a lot of university advisors, specialists who will also provide that advice on a contract basis. It's become very significant. That's why I have 11 people in the department who help manage that, who are Ph.D.s basically, in the various areas of science, whether it's chemical engineering or materials sciences.

[AUDIENCE MEMBER]: In the past five years, companies around the world have had their eyes opened to the challenges of cyber security to protect their intellectual property. This is especially true with technology companies in Asia. What kinds of challenges does TSMC face and how does it address those challenges?

DR. RICHARD THURSTON: On an average, we are receiving over 400,000 attempts to get in our system a day. Sometimes we get up to two million in one day from around the world. It's not just, as you might think, China. China and Taiwan comprise maybe 40% of the total. The United States, Israel, and Canada are other sources. For sources that we can track origin, are they really the original point? We're not sure. We have also worked with government authorities where we believe that governments are behind it. Our technology can be used for all sorts of military and other applications, and so it's a huge undertaking. We have a SOC, or Security Operations Center, that is exclusively dedicated to that effort. It uses the most advanced software, hardware, and forensic tools to analyze, both from within the company and external threats. Four hundred thousand attempts a day are all external threats that we get, and it will spike up at times. Very extensive efforts are used to counter them, and we are working closely with U.S. authorities at times, and Taiwan authorities, as well.

A lot of that is malicious. It's not just attempts to steal; it's attempts to shut us down. What we've also had to do, starting with individual plants and individuals, is boost weak security. In the early days, the software capability and I.T. capability, the systems were independent. Then we went to a unified system, and now we are going away from that again; we're going back to each manufacturing facility having its own multiple firewalls. We do, almost on a daily basis, test those firewalls. The pings that I mentioned don't include our own self-imposed — or customers, actually. We peaked with certain customers' names, some of which I already mentioned, at 14 million in one day, in order to test the security system to make sure that they are workable.

The amount of data that goes through our systems is unbelievable. In fact, IBM is one of the major service providers for software and systems, and our system crashed. Their engineer, who did the software, had put in a back door. He thought, "I'm going to put something in there that will prevent the system from really melting down, and it will shut down," and, "At this number, there's no way that it would ever be met, even cumulatively over a period of time." Shortly after the system went online, in one day, the system crashed, because the data is not English words; instead it is zeroes and ones.

I'll tell a little story. Years ago, I was negotiating T.I.'s very successful operation that was wholly owned in India. That was back in 1984 or 1985. We were the first major U.S. company to set up shop there. I was negotiating with the government, and they started saying, "We want to put five security people into the room to monitor your transmissions." We were putting in the first operative satellite dish in all of India. I started agreeing to it. The guy sitting next to me, the business guy, kicked me. He really did — not just figuratively — he did kick me. We needed to leave the room to talk. He said, "How can you do this? You're the company lawyer! Don't you understand that you're allowing them to get access through their security people?" Of course, if you recall, back in '84, '85, India was still aligned with Russia. I said to him, "Dale, don't worry about it." He said, "What do you mean?" I said, "If you think about it, they don't understand! They think that what is going out over the satellite dish is English words. It's only zeroes and ones, and the combinations thereof, and they don't understand." Then he said, "Yes, I think you're right. Still, don't give it away freely!" I didn't, and we ended up getting tax subsidies and other compensations at the time.

To make a long story short, five or six months after we were operative, I went back to the facilities. I was sitting there with the country manager, and I asked him, "Have you heard from the group of five who are monitoring the site?" "No, strangely, I haven't heard." Purely coincidentally, that afternoon, while I was doing a review, the head of the team came into the office and he sat down and he said, "We really like it here; our families love it." The five guys ended up being life-long employees. He said, "We need your help." I asked, "What's the matter?" He said, "The government's going to do an audit." We said, "An audit of what?" He said, "We've been sending back to them, over the last six months, reports on our monitoring." I said, "Well, how can you be doing that? All it is is zeroes and ones — you don't know what the code is." He said, "That's the problem! What we do every day is we go in the cafeteria, talk with people, and we come up with the reports, and we're sending them back." We ended up having to help them out. It's not so long ago where top engineers in India didn't understand what was actually going out of a satellite.

> "One of the things that we do in the Legal Department is that we take advantage of a very strong technical staff. In addition to our lawyers, we have 11 Masters and Ph.D.s from top universities around the world." – *Dr. Richard Thurston*

JACK FRIEDMAN: I'd like to talk a little bit more on how you adapt innovation. How in the world can a company like yours make multi-million-dollar investments?

DR. RICHARD THURSTON: CAPEX, ten million+ a year.

JACK FRIEDMAN: These innovations have to go on for years or decades.

DR. RICHARD THURSTON: Right.

JACK FRIEDMAN: Your customer base is changing rapidly; you don't even know which of your customers is going to be in business a few years from now. How do you make the decision to commit all that money?

DR. RICHARD THURSTON: It's tough. We have to have a very good forecast team and market team that understand where the business is going. As you said, as we're looking at the CAPEX, it's really by each node that we have a phased approach, as we're ramping up lines. Of course, we first start with R&D technology, prototype fabs, that will produce it. It's a little bit of a mystery.

Then we have a CAPEX committee. All the senior managers, the senior VPs, the CEO, chairman — including myself as senior vice president — are on that committee.

JACK FRIEDMAN: One big global company, which I will not name, has a $23 billion-a-year capital budget. I was told that their Board of Directors as a whole — not a subcommittee that studied it — was lucky if it spent five or six minutes a year to look at that budget.

DR. RICHARD THURSTON: No, we spend a lot more time. Our board is much more involved than that.

JACK FRIEDMAN: I'd like to ask a question of the gentlemen who do work on the deals. How do investors look at Asian credits? Is every country in Asia viewed differently?

CHRISTOPHER "KIT" KAUFMAN: Definitely, the countries are very different. China, of course, had a rash of IPOs, and then people discovered accounting problems after the fact. China's IPO work in the United States looks like a sine curve, and it is starting to come up again, because there are some very large ones that are in the pipeline now.

I don't think that people really worry about a Japanese company at all. They've been in the United States, publicly traded, for 40 or 50 years, some of them. It will depend entirely on both the jurisdiction and the size of the company. Nobody worries about

TSMC. They're just not worried; they're sophisticated; they've done this for years. Their founder worked in the United States. It's a different deal. I did try to do, at one time, an IPO for another Taiwanese company, and I figured out after about six weeks of work that we were never going to be able to get there. Again, it was mostly accounting and how they kept their books.

I think it will continue to be a roller-coaster. Also, part of what's happened is that people in those countries decided for a while, "We'll just go public in Hong Kong; if we can get through the substantive review in Hong Kong, then we don't have to worry about all this junk that you need in the United States." Things have varied by one-year or two-year periods. There were tons of Chinese IPOs, and then there were literally none in the United States.

They do things differently in the debt finance world in Asia as well. There is something that would be anathema to U.S. lawyers; they will do what they call, ironically, a "Euro Bond Deal," where they'll go raise debt money, and the entire transaction has one lawyer.

JACK FRIEDMAN: Where is this deal?

CHRISTOPHER "KIT" KAUFMAN: Often, Hong Kong. I'd be very interested in asking Dick about American law firms doing business in Asia because, like Jones Day, we're worldwide, and we're all over the place — but the limits to growth in the fastest-growing economy in the world, for an American lawyer, are very significant.

DR. RICHARD THURSTON: Right.

CHRISTOPHER "KIT" KAUFMAN: Not just because we can't practice local law, but, frankly, the value that is accorded to legal advice, in other than a cross-border transaction or a U.S. transaction, is small. Lawyers in the United States and Europe have a much higher standing than we do in Asia.

JACK FRIEDMAN: I do want to say that, despite what you hear sometimes, parents are still proud to have their son or daughter be a lawyer! [LAUGHTER]

CHRISTOPHER "KIT" KAUFMAN: Literally, you go over there, and they don't see you in the same role, even in Japan when I've had Japanese clients. Where we were working on a transaction — and Japan's the most sophisticated of the group — they didn't think I needed to know certain things, even though I was representing them. It just wasn't considered necessary; it was all personal.

DR. RICHARD THURSTON: Right.

CHRISTOPHER "KIT" KAUFMAN: Sometimes it had really uncomfortable effects, because I *didn't* know what was going on. It's just different; it's not a United States or even European model.

JACK FRIEDMAN: Are there Asian companies that have a General Counsel in the same, or at least similar, sense that western countries have a General Counsel?

CHRISTOPHER "KIT" KAUFMAN: Well, you're talking to one! [LAUGHTER]

JACK FRIEDMAN: Are they pretty rare?

DR. RICHARD THURSTON: You're seeing more. When I started in 2002, there was only just a very small handful of Asian companies that would ever consider doing it, in large part because of ethics, integrity, and so forth. TSMC has always been known, and Morris made sure that integrity was our #1 principle. As litigation and regulatory investigations have really focused a lot on Asia, for various reasons — it's not picking on them, but they have problems. You're finding that the General Counsel and legal department have started to come into companies, but still there are very few that are run like a western company does. I have to mix East and West in there, but the fundamental principles and governance principles are western legal practice. Many General Counsels still report to the CFO rather than to the CEO or the chairman. In Taiwan, the chairman is really the chief executive officer, almost by law. Where I've seen larger numbers of General Counsels, at least by name cards and so forth, is actually China. China has been, on paper, doing a lot more.

Two of the strongest U.S. law firms in Taiwan have been Jones Day and Baker & McKenzie, and in large part because they have been set up and operated as indigenous local firms with local partners that are from Taiwan. In the case of Jones Day, Jack Huang has really been a driving force. They have American-trained and other jurisdiction trained and licensed folks. In China, we use the DeHang firm in Beijing; they have other offices and have had tremendous western-style legal support.

JACK FRIEDMAN: Last year, you did a financing with Goldman Sachs. Could you tell us about the financings you've done?

DR. RICHARD THURSTON: As of five years ago our need for funding for CAPEX was only $1 to $2 billion a year. That was all self-funded. As we have had to go to a $10 billion a year level, no matter how well

you're being run, it's also not smart just to do it all out of profits. Shareholders want dividends; actually, they want *more* dividends. We have a strong in-house team, a combination of legal and finance that does the core of that. We generally work with Goldman as our investment banker, and where we've used outside counsel, it's largely been Jones Day. We handle a lot of it internally.

JACK FRIEDMAN: Did you raise a billion dollars?

DR. RICHARD THURSTON: All together, we have out in the market maybe $10 billion now. We haven't gone to the equity market.

JACK FRIEDMAN: Was it raised primarily in the U.S.?

DR. RICHARD THURSTON: No, we have a good syndication around the world that includes Japan, Taiwan, U.S., some Europe and some Middle-Eastern funding.

CHRISTOPHER "KIT" KAUFMAN: One other thing to mention is that a fundamental principle of U.S. law and most European law is the sanctity of the contract, and that's a very different matter in Asia. In my experience in a number of places, including even in Japan, where you have a take-or-pay contract, and then it becomes the magic word used in English, "It wasn't feasible." That really means, "We're not going to do it. We don't expect you to do anything about the fact that we're not going to do it, other than try to work something out with us." Some of this is so relationship-driven that they would be shocked if you said, "Then I'm going to sue you."

DR. RICHARD THURSTON: Right.

CHRISTOPHER "KIT" KAUFMAN: It's very sophisticated in many respects, but very different. Some of what American lawyers, in particular, bring to bear are just not things that they care about.

JACK FRIEDMAN: Somebody told me that Chinese businessmen don't know what the word "no" means when they do business in America. They will often say, "Let's just make it happen." They don't understand the idea that we take these things very seriously.

One time I asked the head of the SEC on the West Coast what was the largest problem that he had with foreign companies. He said, "Trying to explain to Chinese banks on the West Coast, what's expected of them. They try to do the right thing, but sometimes they don't understand what it is. We have to keep explaining to them that this is really how it's done."

I would like to thank our Guest of Honor and the Distinguished Panelists here today.

DR. RICHARD THURSTON: Thank you.

Louis Norwood ("Woody") Jameson

Partner, Duane Morris LLP

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Louis Norwood ("Woody") Jameson is chair of Duane Morris' Intellectual Property Practice Group. Mr. Jameson practices in the area of intellectual property law and litigation with particular emphasis on patent litigation. Mr. Jameson also litigates a broad range of intellectual property disputes, including trademark and trade dress litigation, copyright litigation and false advertising disputes. In 2014, Mr. Jameson was named Outstanding IP Litigator for Georgia, by *Managing Intellectual Property*. The team he leads also received the *Managing Intellectual Property Award* for the top patent litigation practice in the southern United States.

Mr. Jameson has been named on multiple occasions a Georgia Super Lawyer in the field of IP litigation by *Atlanta Magazine* and *Georgia Super Lawyers Magazine* and, in 2009 through 2014, *Chambers USA: America's Leading Lawyers for Business* included Mr. Jameson in its listing of leading IP lawyers in Georgia.

Mr. Jameson has represented several well-known companies in complex patent litigation involving such technologies as cable television technology, Internet technology, online banking transactions, MPEG decoding technology, telecommunications and computer hardware and software applications. He likewise has had lead responsibility for trademark and false advertising litigation for Fortune 500 companies, and anti-counterfeiting activities surrounding the 1996 Summer Olympic Games. He is a member of the Litigation and Patent, Copyright and Trademark Law sections of the American Bar Association, the State Bar of Georgia and the Atlanta Bar Association. He has served on the Federal Trial Practice and Procedure Committee of the American Bar Association, has served on numerous committees of the International Trademark Association, and has been a speaker at seminars on a multitude of patent and trademark topics.

Mr. Jameson is a 1988 *magna cum laude* graduate of the University of Georgia School of Law and a 1984 graduate of the University of North Carolina.

Duane Morris LLP

Duane Morris LLP, a law firm with more than 700 attorneys in offices across the United States and internationally, is asked by a broad array of clients to provide innovative solutions to today's legal and business challenges.

Growth and Culture

Evolving from a partnership of prominent lawyers in Philadelphia a century ago, Duane Morris now has offices in many major markets and continues to expand across the country and overseas. Throughout this expansion, Duane Morris remains committed to preserving the collegial culture that has attracted so many talented attorneys. The firm's leadership believes this culture is truly unique among large law firms, and that outstanding legal work is best accomplished by skilled professionals who respect each other and work well together.

Leadership and Experience

Duane Morris lawyers hold leadership positions in professional associations, as well as in educational, cultural and charitable organizations and with community groups. Many of the firm's attorneys come to Duane Morris after having held senior positions in government agencies and large corporations.

At A Glance

- AmLaw 100 Since 2001
- More than 700 lawyers in offices in the U.S., UK and Asia
- Firm has nearly tripled in past 16 years
- Over 25% of client business conducted through multiple offices and practices

Second Harvard Business School case study of the firm, titled "Duane Morris: Collaborating for Growth," was part of the Harvard Business School curriculum and made available to business schools around the world for course study.

David M. O'Dell

Partner, Haynes and Boone

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Setting precedent.

David O'Dell specializes in intellectual property law, including patent prosecution, and in the development of intellectual property strategies for protecting and commercializing technology. His technical areas of experience include semiconductor processing, circuit design, computer software and hardware, and telecommunications. Prior to joining Haynes and Boone, David was a professional engineer and worked for several years in the semiconductor industry as a circuit designer, semiconductor product engineer, and computer programmer. In addition to his law degree, David holds an electrical engineer degree.

David's technology law experience includes representing clients in more than 70 *inter partes* and *ex parte* reexaminations, including hearings before the Board of Patent Appeals and Interferences (BPAI, now the Patent Trial and Appeal Board, or PTAB) at the United States Patent and Trademark Office. He has experience drafting and prosecuting hundreds of original United States patent applications and developing intellectual property portfolios for both start-up and later stage technology companies. He implements competitor analysis and evaluation, and identifies and exploits patent "white space" in the competitive landscape. He represents and defends companies in the assertion of U.S. and foreign patents and counsels regarding patent validity and infringement opinions and the design and implementation of non-infringing alternatives to patented technology. He also works with trial lawyers in complex patent infringement suits.

Haynes and Boone

Who We Are
Haynes and Boone is one of the fastest-growing law firms, with more than 500 attorneys in 12 offices and 30 major legal practice areas. Our growth has been driven by our client service strengths, especially our problem-solving acumen and our ability to collaborate with clients. We are creative strategists and trusted advisors to our clients.

Special Firm Culture
We have a distinctive culture that differentiates us in the marketplace. Our culture is defined by our collaborative work environment and by putting the interests of our clients first.

Service Reputation
We are proud of our reputation in the marketplace. We have received multiple honors for our approach to client service including recognition by Corporate Board Member magazine and from the BTI Consulting Group's survey of corporate general counsel.

Global Reach
We serve our clients' global business needs through our cross-border practice capabilities and our international legal experience. We have assisted clients on matters involving more than 100 countries. Haynes and Boone lawyers are proficient in 26 languages.

Diversity
Haynes and Boone recognizes the benefits of having a diverse workforce. We constantly strive to add voices from different backgrounds to our legal team. We have twice received the prestigious Thomas L. Sager Award given by the Minority Corporate Counsel Association for our diversity efforts.

Public Service
We are committed to serving the communities in which we are located. Toward that end, we annually dedicate substantial time and funds to pro bono work and community service. This commitment is integral to the Haynes and Boone culture.

R. Scott Cohen

Partner, Jones Day

Scott Cohen concentrates his practice primarily on domestic and cross-border mergers and acquisitions on behalf of corporate and private equity clients in a broad range of industries, including technology, energy and energy services, manufacturing, and consumer products. His experience also includes capital markets, restructurings, recapitalizations, and corporate governance matters.

Recent representative transactions include the sale of Samson Resources to a KKR-led investor group ($7.2 billion), Texas Instruments' acquisition of National Semiconductor ($6.5 billion), Taiwan Semiconductor's investment in ASML Holdings ($1 billion), the sale of Latrobe Specialty Steel to Carpenter Technology ($558 million), Viasystems Group's acquisition of DDi Corp. ($283 million), Tokyo Electron's acquisition of FSI International ($252.5 million), and Fluor Corporation's acquisition of a majority stake in NuScale Power, LLC.

Transactions prior to joining Jones Day include Texas Instruments' acquisitions of Burr Brown ($7.6 billion) and Unitrode ($1.2 billion), the sale of Pilgrim's Pride to JBS under a chapter 11 plan ($2.8 billion), the sale of Berg Electronics to Framatome ($1.85 billion), Pilgrim's Pride acquisition of Gold Kist ($1.1 billion), the recapitalization of Dr Pepper/Seven-Up Companies ($1.3 billion), the sale of Morningstar Group to Suiza Foods ($960 million), and the sale of Thermadyne Industries to DLJ Merchant Banking Partners ($790 million).

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Tracing our origins to 1893, Jones Day now encompasses more than 2,400 lawyers resident in 41 locations worldwide and ranks among the world's largest and most geographically diverse law firms. Surveys repeatedly list Jones Day as one of the law firms most frequently engaged by U.S. corporations, and many of our lawyers have achieved national recognition in their disciplines.

Our commitment to our clients has repeatedly earned the Firm the No. 1 ranking for client service by the BTI Consulting Group, an award based on survey results from Fortune 1000 corporate counsel. In 2012, Jones Day once again received the highest ranking in the survey. In fact, since the inception of the BTI Client Service Ranking 13 years ago, Jones Day is the only firm to have earned top ratings year after year. In every survey, Jones Day has ranked in the top five, and our consistent high ratings have earned us a place among the elite few firms elected to the BTI Client Service Hall of Fame.

Thomson Reuters, one of the foremost authorities on financial-industry performance, has ranked Jones Day No. 1 for number of M&A deals completed worldwide in each quarter since the end of 2000. In 2008, Jones Day was named the nation's best Labor & Employment practice by *The American Lawyer* as part of the magazine's prestigious "Litigation Department of the Year" competition. In 2004, the Firm was named "Product Liability Department of the Year" by *The American Lawyer*, as well as a top-five finalist for "Litigation Department of the Year."

Jones Day is a global law firm with 41 offices in major centers of business and finance throughout the world, its unique governance system fosters an unparalleled level of integration and contributes to its perennial ranking as among the best in the world in client service. Jones Day provides significant legal representation for almost half of the Fortune 500, Fortune Global 500 and FT Global 500.

Brian L. Ferrall

Partner, Keker & Van Nest LLP

KEKER & VAN NEST LLP

Brian Ferrall represents technology and biomedical clients primarily in high-stakes trade secret, patent and other intellectual property disputes, and has broad experience in contract, unfair business practices and antitrust litigation. He also advises clients on IP protection, licensing and competitive strategy. Mr. Ferrall has expertise guiding international clients through the challenges of litigating in the United States.

By developing a successful strategy with the client at the outset of a dispute, he is able to achieve efficient and effective resolutions before trial, or victories at trial. Mr. Ferrall has tried cases to verdict in California federal and state courts, and federal courts in Delaware and Texas, and has served as lead counsel on numerous cases.

Cases of Note

British Telecommunications v. Comcast Cable: We served as lead counsel for Comcast in an eight-patent case brought by British Telecom in Delaware federal court. The case targeted Comcast's high speed data and telephony services and video encryption. We also asserted Comcast patents against British Telecom in Texas federal court. In Delaware, we prevailed on six of the eight patents by way of summary judgment and stipulated dismissals, and thereafter reached a very favorable resolution of both litigations.

STC.UNM v. Semiconductor Company: We represented a leading semiconductor company in a patent lawsuit brought by the licensing arm of the University of New Mexico. Through careful discovery and then summary judgment, we persuaded the court that the patent was unenforceable for most of its term, and that the plaintiff lacked standing to sue as to the remainder of its term. The standing issue was affirmed on appeal: 2014 WL 2535257.

C-Cation Technologies v. Comcast Cable, et al.: We represented Comcast in a patent infringement case brought by C-Cation Technologies in the Eastern District of Texas, and a related breach of contract claim Comcast brought in the Southern District of New York. The plaintiff targeted high speed data and telephony services and sought damages well into nine figures. We were selected as lead trial counsel for all defendants, which included three other cable companies. After several pre-trial victories, we reached a favorable settlement for all defendants.

STC.UNM v. Taiwan Semiconductor Manufacturing Company: We served as lead counsel for TSMC in this investigation before the International Trade Commission. We secured a very favorable settlement and then dismissal, safeguarding TSMC's freedom to operate certain advanced semiconductor patterning techniques patented by the University of New Mexico.

Keker & Van Nest LLP

For more than thirty years, Keker & Van Nest's attorneys have tried and litigated complex, high-stakes civil and criminal cases throughout the nation, obtaining the best possible results for our clients. We take the tough cases, the make or break cases where companies, products, or careers are riding on the result. It is in the nature of tough cases to end up in court where our expertise and deep bench of trial lawyers shines, and where they can make a significant impact on our client's future. Furthermore, if an advantageous settlement is in our client's best interest, we have found our track record of impressive trial wins provides a significant advantage during negotiations.

Our clients are leading executives, as well as some of the most successful companies in the world, including Google; Intel; Electronic Arts; Comcast Cable Communications; Genentech; HTC; McKesson; Medtronic; and Taiwan Semiconductor Manufacturing Company.

Christopher "Kit" Kaufman

Partner, Latham & Watkins

LATHAM & WATKINS LLP

Mr. Kaufman's practice focuses on mergers and acquisitions, corporate finance and corporate governance. His practice emphasis is on high-technology clients including semiconductor, software and biotechnology companies, privately held start-up companies and major investment banks. Mr. Kaufman has represented a wide variety of clients in:

- Mergers and acquisitions
- Hostile takeovers, representing both targets and unsolicited acquirers
- Successful proxy contest engagements
- Problems of capital formation for start-up entities
- Public financing
- Public offerings by foreign companies in the United States
- Both public and private securities offerings representing issuers, underwriters and venture capital entities

Mr. Kaufman served as Chairman of the Board of Directors of the PRO Corporation and Rexall Corporation and on the Boards of Directors of:

- Qantel Corporation
- Applied ImmunoSciences, Inc.
- FP International, Inc.

He has been a member of the American Bar Association Committee on Negotiated Acquisitions and Committee on Federal Regulation of Securities and was a member of the American Bar Association Committee on Corporate Laws, which rewrites the Model Business Corporation Act. Mr. Kaufman participated in the task force that drafted the American Bar Association Committee on Federal Regulation of Securities comments on Forms S-1, S-2, and S-3 under the 1933 Act.

He has received the following recognitions:

- Mr. Kaufman was named to the *2012 Lawdragon 500*, which recognizes leading attorneys in the U.S.
- "A well-known practitioner who advises on M&A, corporate finance and corporate governance matters, with a particular emphasis on hi-tech companies." by *Chambers U.S. (2011)*
- One of America's Leading Business Lawyers in corporate law by *Chambers U.S.* (2007-2011)
- A leader in his field by *The Best Lawyers in America*
- One of the world's leading practitioners of the law in *The International Who's Who of Corporate Governance Lawyers 2007*

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