

**AMERICA INVENTS ACT
PRO BONO ASSISTANCE PROGRAM**

SHEKAR RAO
Vice President and Chief Technology Officer
Center for Innovation

State Bar of Texas
27th ANNUAL
ADVANCED INTELLECTUAL PROPERTY LAW COURSE
March 20-21, 2014
Dallas

CHAPTER 14

Bio sketch of

Shekar Rao

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Shekar Rao is Vice President and Chief Operating Officer at the Center for Innovation, Arlington (Texas) which was established to be a catalyst for sustainable, technology based economic development through Open Innovation. He is responsible for executing a strategic approach to building an innovation economy by creating access to world-class technologies and knowhow, capital and talent.

Mr. Rao leads a team involved in the formation of collaborative partnerships between Industry, Federal Labs, Research Universities, Venture Capital firms and Economic Development organizations.

To facilitate access to technologies, the Center for Innovation established TechComm - a Partner Intermediary for the Departments of Defense, Agriculture, Homeland Security and The National Institutes of Health. TechComm has been contracted by these federal agencies to commercialize their R&D and patent portfolios. Mr. Rao is actively involved in building an Open Innovation Affiliate Network comprising Universities, Economic Development Entities, Industry, Angel Investors and Venture Capital firms, and, matching technology needs in the marketplace with technologies through the Center's Network. The Center for Innovation also houses and manages the Pro Bono Assistance Center for Independent Inventors under the auspices of US Patent and Trade Mark Office.

Mr. Rao has also led a comprehensive approach to economic development by creating a pipeline of talent covering the education continuum: from K-12 to Community College, University Education and Adult Retraining. This comprises programs such as Science, Technology, Engineering and Math (STEM) Education, Career Planning and Entrepreneurship Development.

He was also the Executive Director of the Texas Medical Research Collaborative (TxMed), a Proof of Concept Innovation Fund for collaborative translational medical electronics research. His team also provides access to Angel Investors and Venture Capital firms for startups.

Earlier he was the worldwide manager for medical electronics solutions at Texas Instruments where he built strategic relationships with leading medical device companies and identified and funded University Research in Medical Electronics. Prior to that, Mr. Rao founded startups in Telecom, Semiconductor IP and Life Science sectors. Has over 35 years of experience within start-ups as well as large companies such as TI, NEC Electronics and LSI Logic. Mr. Rao's worldwide experience spans technology innovation, product development, operations, business strategy, marketing and sales in emerging markets and technologies. He possesses a deep understanding of issues and opportunities in economic development, technology innovation, medical devices, healthcare, life sciences, semiconductors, telecom, networking, knowledge management and enterprise automation.

He has a BSEE and an MBA in International Trade. He is a member of IEEE, LES and other professional bodies. He was the Founding Chair of the IEEE Engineering in Medicine and Biology Society (EMBS) Dallas Chapter and the EMBS Global Chapter Development Chair. He has been an invited chairman, speaker and panelist at a number of national and international events.

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27th Annual Advanced Intellectual Property
Law Course, Dallas, Texas
March 20-21, 2014

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“The key to our success – as it has always been – will be to compete by developing new products, by generating new industries, by maintaining our role as the world’s engine of scientific discovery and technological innovation.

It’s absolutely essential to our future.”

– President Barack Obama, November 17, 2010



The Competitive Threat



The Center of Gravity of Innovation has shifted East

- In Dec 2012 **China overtook the U.S. as the world's largest patent filer**. In 2011, China's patent office received over **526,000** patent applications whereas the United States received just over 503,000.
- In April 2012 the Chinese government announced "Special Funds for Subsidizing Foreign Patent Applications." Under these measures, patent applications would be eligible to benefit from subsidies when charges occur for the patent searching and filing process.
- It's expected that by 2015 published patent applications will total 500,000 in China, 400,000 in the U.S. and 300,000 in Japan.



The US Innovation and Manufacturing Landscape



Small Business and Patent Protection

- Small businesses are the primary driver of job creation in the US
- Startups create on average three million U.S. jobs per year.
- Though this pattern of job creation has largely held true for over thirty years, capacity of US small businesses to create jobs is at risk.
- American firms have to compete and grow in a global market.
- Many small companies now have to rely on patent protection to prevent competitors from simply copying their innovations.
- But small companies face significant financial challenges in acquiring, maintaining, and enforcing patents outside the US.
- **The Leahy-Smith America Invents Act requires the Director of the USPTO, in consultation with the Secretary of Commerce and the Administrator of the Small Business Administration, to study how best to support businesses with international patent protection.**



Importance of Intellectual Property (IP) Related Industries in US Economy

- The entire U.S. economy relies on some form of IP, because virtually every industry either produces or uses it.
- 75 industries (from among 313 total) were IP-intensive accounting for 27.1 million jobs, (18.8 percent of all 2010 employment).
- IP-intensive industries accounted for about \$5.06 trillion in value added, or 34.8 percent of U.S. gross domestic product (GDP), in 2010. While IP-intensive industries directly supported 27.1 million jobs either on their payrolls or under employment contracts, these sectors also indirectly supported 12.9 million more supply chain jobs throughout the economy.
- Every two jobs in IP-intensive industries support an additional one job elsewhere in the economy.
- In total, 40.0 million jobs, or 27.7 percent of all jobs, were directly or indirectly attributable to the most IP intensive industries.



Employment and Wages in IP-Intensive Industries

- Between 2010 and 2011, the economic recovery led to a 1.6 percent increase in direct employment in IP-intensive industries, faster than the 1.0 percent growth in non-IP-intensive industries.
 - Growth in copyright-intensive industries (2.4 percent)
 - Growth in patent-intensive industries (2.3 percent)
 - Growth in trademark-intensive industries (1.1 percent)
- Jobs in IP-intensive industries pay well compared to other jobs.
 - Average weekly wages for IP-intensive industries were \$1,156 in 2010 or 42 percent higher than the \$815 average weekly wages in other (non-IP-intensive) private industries.
 - This wage premium nearly doubled from 22 percent in 1990 to 42 percent by 2010.
 - Patent- and copyright-intensive industries have seen particularly fast wage growth in recent years, with the wage premium in patent-intensive industries increasing from 66 percent in 2005 to 73 percent in 2010, and the premium in copyright-intensive industries rising from 65 percent to 77 percent.



Education Level in IP-Intensive Industries

- The comparatively high wages in IP-intensive industries correspond to, on average, the completion of more years of schooling by these workers.
- More than 42 percent of workers aged 25 and over in these industries in 2010 were college educated, compared with 34 percent on average in non-IP-intensive industries.

Addressing The Competitive Threat and America Invents Act

Establishment of Regional USPTO Offices

- Leahy-Smith America Invents Act of 2011 (AIA), signed into law by President Obama in September, requires the USPTO to establish regional satellite locations as part of a larger effort to modernize the U.S. patent system over the next three years.
- U.S. Patent and Trademark Office (USPTO) announced that it will establish regional USPTO offices in
 - Dallas-Ft. Worth-Arlington, Texas (Dallas)
 - Denver-Aurora-Broomfield, Colorado (Denver)
 - San Jose-Sunnyvale-Santa Clara, California (Silicon Valley)
 - Detroit, Michigan
- The four offices will function as hubs of innovation and creativity, helping protect and foster American innovation in the global marketplace, helping businesses cut through red tape, and creating new economic opportunities in each of the local communities.
- Selection of the four sites was based upon a comprehensive analysis of criteria including geographical diversity, regional economic impact, ability to recruit and retain employees, and the ability to engage the intellectual property community, among others.



USPTO Satellite Offices

- The creation of USPTO satellite offices is significant in that it marks the first time in the USPTO's 200-year history its operations have expanded outside Washington D.C.
- The USPTO believes the satellite offices will serve as
 - hubs of innovation and creativity,
 - help protect and foster American innovation in the global marketplace
 - help businesses cut through red tape
 - create new economic opportunities in each of the local communities.



Purpose of Satellite Offices

- As part of America Invents Act of 2011 (AIA), Congress required the USPTO to establish the satellite offices by September 2014.
- With the establishment of the new offices, the USPTO should be able to:
 - increase outreach activities,
 - enhance examiner retention,
 - improve examiner-recruiting,
 - decrease the patent application backlog,
 - improve patent examination quality.
 - allow the agency to better interact with the applicant community



The Dallas USPTO Satellite Office

- The Dallas office is expected to open its doors by September 2014.
- The Office will be located at The Terminal Annex Federal Building, located along the southern edge of Dealey Plaza in Downtown Dallas
- The office will operate as a place for small businesses and entrepreneurs to
 - Navigate the patent process
 - Meet with Patent Examiners
 - Access USPTO's comprehensive search databases.
- The office will also support job creation and stimulate the local economy.



America Invents Act and establishment of Pro Bono Assistance Centers

- Pursuant to Section 32 of the America Invents Act (AIA), which took effect in September 2011, 1 the USPTO was directed to work with and support intellectual property law associations to establish pro bono programs across the nation.
- In accordance with this Congressional mandate and with LegalCorp leading the way, the America Invents Act Pro Bono Task Force convened in October 2011 to coordinate nationwide efforts to develop similar programs in other areas of the country.



The USPTO Regional Pro Bono Assistance Program Office

- The **Center for Innovation in Arlington, TX** was chosen to house and manage the Pro Bono Assistance Center for Inventors in Texas and the surrounding region
- Ultimately each State will have such Inventors' Centers



The Need of Attorneys to provide Pro Bono Assistance

- To find additional fulfillment, many attorneys get involved in their communities and give back by providing pro bono legal services to clients in need.
- In the pro bono world, a transactional attorney is able to cover general corporate areas even if the specific issue faced by the pro bono client does not fall directly within the attorney's usual practice area.
- Likewise, litigators typically have various options for assisting pro bono clients by appearing in court, including for small claims, housing, harassment, immigration, or criminal defense, or by assisting within another dispute resolution proceeding.
- Offering services in a discipline in which one does not normally practice may be stressful and even create a potential for mistakes.
- A need therefore has existed for years for patent attorneys to be able to help low-income inventors in the area of patent prosecution.



The Need of the Independent Inventor

- Inventors seek the fulfillment of their dreams of one day seeing their inventions commercialized
- These inventors understand that a significant step to protecting their innovation is to obtain a patent.
- When faced with the complex and sometimes expensive process of patent prosecution, low income inventors are often deterred from filing for a patent.
- Unfortunately, the patent prosecution process is not necessarily suited for the novice, and the inventor may become frustrated, notwithstanding the USPTO's ongoing efforts to make the process more accessible.
- These inventors would be the perfect clients for the patent prosecution attorneys seeking to offer pro bono services in their respective fields.



The Confluence Of These Two Needs

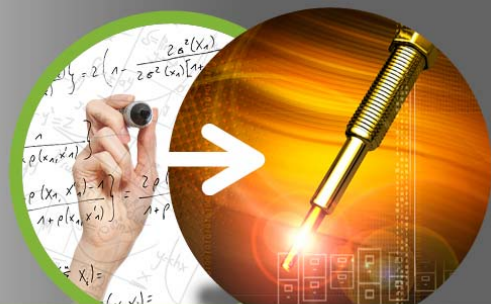
- The vision to meet these two needs began with David Kappos, the then Under Secretary of Commerce for Intellectual Property and Director of the USPTO. Director Kappos recognized the demand in the independent inventor community for pro bono assistance with prosecuting patent applications
- In April 2010, Director Kappos and John Calvert, then Administrator of the Inventor Assistance Program (IAP), began discussing how to create a program to eliminate the financial hurdles that often prohibit independent inventors from patenting and bringing to market great ideas.
- A first of its kind program, the Inventor Assistance Program was launched in Minneapolis under the auspices of LegalCorp (a non-profit and one of the key architects of the program) in September 2010. This Pilot is an IAP that matches volunteer patent attorneys with inventors having already filed pro se patent applications for their inventions.
- This program is being offered as a template for other Pro Bono Assistance program nationwide.

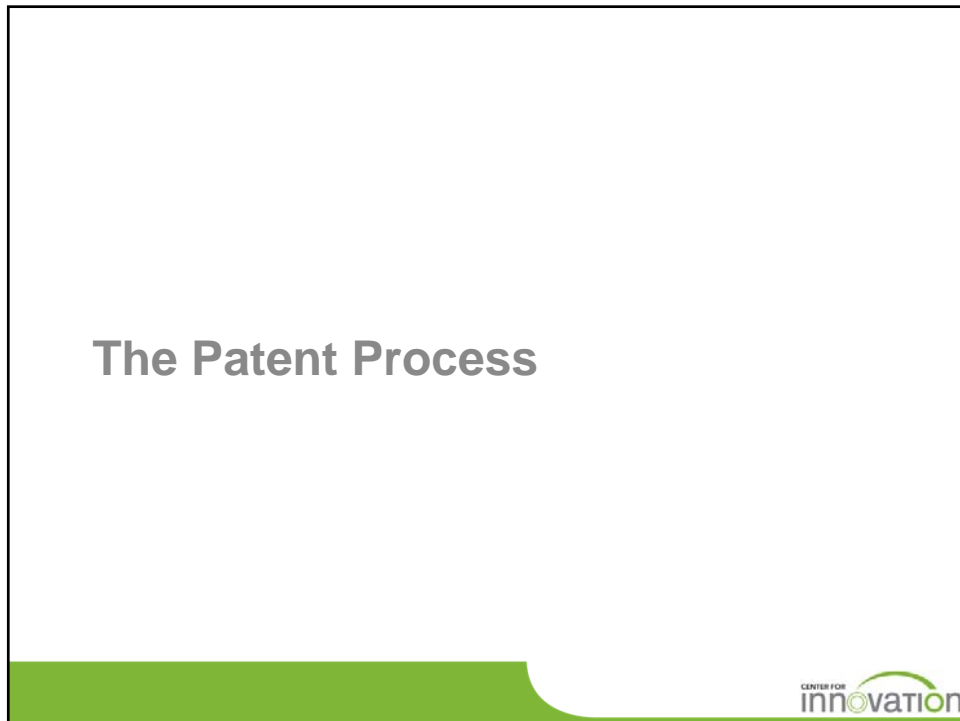
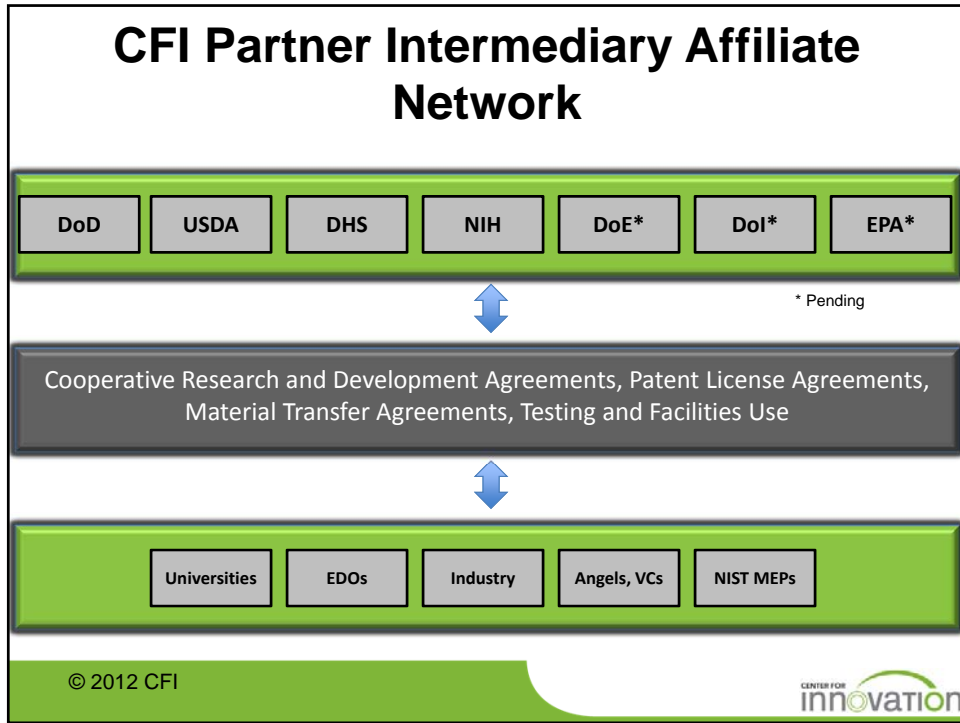


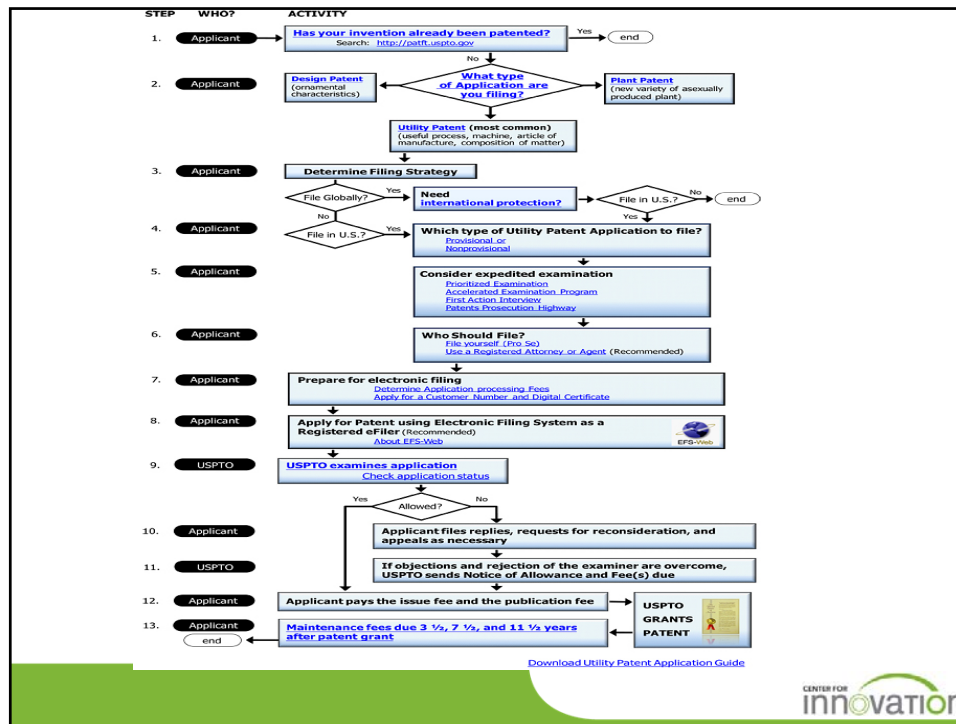
The Center for Innovation – Creating Technology Based Economic Development through Open Innovation

TECHNOLOGY TRANSFER

We are moving technology out of the lab and into the marketplace, facilitating an innovation economy.



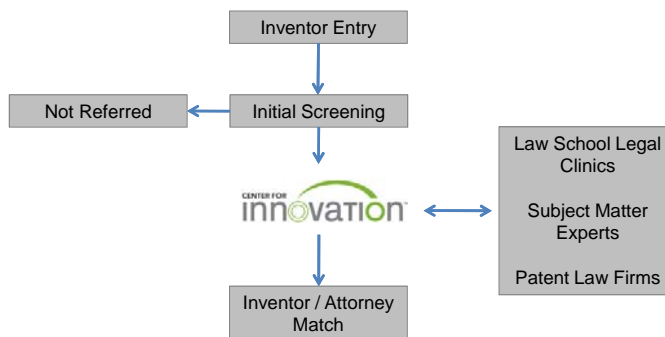




Patent Search

- [How do I know if my invention is patentable?](#)
- [How to Conduct a Preliminary U.S. Patent Search: A Step by Step Strategy](#) - Web Based Tutorial (36 minutes)
- [The Seven-Step Strategy](#) - Outlines a suggested procedure for patent searching
- Patents may be searched using the following resources:
 - [USPTO Patent Full-Text and Image Database \(PatFT\)](#)
 - [USPTO Patent Application Full-Text and Image Database \(AppFT\)](#)
 - [Patent Application Information Retrieval \(PAIR\)](#)
 - [Public Search Facility](#)
 - [Patent and Trademark Resource Centers \(PTRCs\)](#)
 - [Patent Official Gazette](#)
 - [Common Citation Document \(CCD\)](#)
 - [Search International Patent Offices](#)
 - [Search Published Sequences](#)
 - [Patent Assignment Database \(Assignments on the Web\)](#)

The Pro Bono Assistance Process



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Intake Process

- Program applicants pass a basic screening process by the Federal Circuit Bar (USPTO)
- Pro Bono Patent Assistance Program Director receives cleared applicants and verifies they fall within 300% of federal poverty guidelines.
- Pro Bono Patent Assistance Program Director forwards the information to the Pro Bono attorney.
- Pro bono attorney conducts an internal conflicts check and notifies Pro Bono Patent Assistance Program Director of the result.
- If conflict check is clear, Pro Bono Patent Assistance Program Director notifies the client if there is an attorney match.
- Attorney contacts Client and Engagement Letter is put in place

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AIA Pro Bono Patent Assistance Center Steering Committee

- Law School Members: 2
 - Ms. Darby Dickerson, Dean, Texas Tech School of Law
 - Mr. Royal Furgeson, Dean, University of North Texas - Dallas College of Law
- Law Firm Members: 4
 - Justice Craig Enoch, Steering Committee Chair, Member, Enoch Kever PLLC
 - Mr. Trevor Lind, Attorney, Lee & Hayes
 - Mr. Ryan McCarthy, Principal, Fish & Richardson P.C.
 - Mr. William Hulsey, Principal, Hulsey Intellectual Property Lawyers
- Corporation Members: 1
 - Mr. Eric Metzger, Manager, Intel Corporation



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