

C. INTELLECTUAL PROPERTY AND INNOVATION

- Thank you, Mr. Chair.
- The United States is pleased to join with Brazil in sponsoring this item on the agenda.
- Innovation is a common objective we all share, whether as inventors or consumers or governments. Innovation offers tremendous potential, not only to build businesses, to generate revenue, and to create jobs, but also to answer critical questions about the world in which we live and to address the challenges we all face. Innovation can actually improve our standards of living.
- Our objective today is to have an exchange of information on national innovation strategies and the role intellectual property protection plays in fostering innovation. Our hope is that by sharing national experiences, we all may contribute to the mutual goal of providing stable and predictable environments to promote and benefit from innovation.
- In the United States, our innovation policy focuses on investing in the building blocks of innovation and promoting market-based innovation.
- Each of these aspects recognizes that the private sector is the engine for innovation and that the government plays an important role in supporting such innovation.
- Turning to the building blocks of our innovation architecture, U.S. resources are directed to educating our students with 21st-century skills, strengthening and broadening fundamental research, building and maintaining physical infrastructure, and developing an advanced information technology ecosystem.
- Turning to R&D, for example, investments help to encourage basic research – research that may at some point have a commercial potential, but may take decades to realize. For example, the first fully electronic digital computer was funded in the 1940s by the United States government. The first commercially successful computer – with modest sales of 1,800 units – was sold in the 1950s. Of course, the rewards of the investments in the 1940s and 1950s are still being enjoyed today.
- The development and commercialization of intellectual property in connection with government-funded R&D has been significantly enabled by U.S. federal legislation, known as “Bayh-Dole Act” that has been studied and emulated in many other jurisdictions.
- Regarding the promotion of market-based innovation, the United States employs a variety of mechanisms to reduce the risk inherent to the inventive process. These mechanisms include: tax credits for research and experimentation; lending support and tax incentives for entrepreneurs; regulatory review and streamlining; innovation incentives, such as prize funding and challenges; and, of course, stable, predictable, and transparent systems for the protection of intellectual property rights.
- These and other policies are designed to mobilize inventors, whether working in

government laboratories, office parks or home garages.

- The U.S. National Aeronautics and Space Agency's (NASA) experience on fostering invention to address specific challenges is instructive. NASA launched its Innovation Pavilion to develop a forecasting algorithm to protect astronauts from radiation exposure in space. Over 500 participants from 53 countries entered the competition. NASA received a solution that exceeded its requirements from a retired radio-frequency engineer in New Hampshire. The winner had never worked for NASA, nor responded to a past government request for proposals. His winning approach forecast solar proton events with 85 percent accuracy.
- Fostering market-based innovation is not only about advancing innovation through promoting capitalization and a supportive regulatory environment, but also about driving commercialization. Having a great idea is only the first of many steps. Without a market place of ideas that catalyzes commercialization, the social benefit of innovation to consumers will not be fully realized.
- Stable and predictable intellectual property protection provides another indispensable incentive to innovate by rewarding the risk inventors take. Too many ideas fall prey to inadequate funding, theft, and failed commercialization and diffusion. IP provides a critical safeguard, particularly to economies like all of ours that rely on innovation.
- Take the case of a farmer and businessman working in Kampala, Uganda. For this entrepreneur, IP promotes "innovation" through capturing the value chain of roast coffee, so that his community could benefit from selling high value roast coffee, rather than unprocessed raw beans.
- To advance up this value chain and provide this product – a new product from his community – he also introduced many new services and practices, include banking services, terracing to conserve water, pulping machines to clean the beans, and a new organizational structure of purchasing beans from farmers.
- These improved business processes alone would have yielded additional returns for the coffee growers, but this entrepreneur took another step – he marketed the coffee with a brand, a brand that would develop a reputation that consumers would appreciate and thus seek out the brand for future coffee purchases.
- The protection of this individual's innovations and those of his community by intellectual property rights such as trademark laws and unfair competition protections help to ensure that the community can continue to benefit from these innovations.
- To maximize such innovation, IP systems also benefit from refinement and improvement, including through promoting recognized best practices. The recent U.S. enactment of the America Invents Act (AIA) exemplifies several best practices. Under the AIA, the U.S. government has taken steps to significantly reduce patent application backlogs and otherwise streamline the patent application process.
- Other important best practices include promoting patent quality and licensing to enable IP systems to optimize innovation. By ensuring the registration of high-quality patents, IP authorities preserve the integrity of the public domain and promote well-

defined patents to foster continued innovation. Disclosure of innovations through high-quality patents, combined with patent licensing, allows inventors to lawfully borrow and cross-fertilize knowledge in order to advance additional innovation.

- To ensure that the benefits of a modern system of high-quality patents are broadly available, the AIA also includes a pro bono program designed to assist financially under-resourced independent inventors and small businesses. Through the program, the USPTO works with and supports intellectual property law associations around the country to provide advice on patent applications; to inventors and small businesses that do not exceed a certain income threshold.
- Additional “best practices” for pro-innovation patent systems include a “first inventor to file” system, which has long existed in major jurisdictions around the world. With the adoption of the AIA, the United States has now joined the international consensus.
- Patent grace periods represent another innovation best practice. After invention often comes the critical step of securing funding to actually grow a business, which means showing investors what has been developed and putting out information while also preparing a patent application. In the United States, we have found that intellectual property is often a core asset of these innovative startup companies. So a grace period is one example of an innovation-friendly patent system feature that is critical to 21st century innovation.
- An additional U.S. Government initiative I would like to highlight is the “Patents for Humanity” program. This initiative is part of the President’s global development agenda and provides business incentives to spur increased participation by the patent community in confronting global challenges by rewarding those who apply their patented technology to address humanitarian issues among impoverished people around the world, including medical technology, food & nutrition, clean technology, and information technology.
- Finally, while governments can significantly enhance national innovation, including through IP awareness and an emphasis on quality, it is necessary to also stress the importance of avoiding the temptation of policies that degrade national innovation environments or that seek to promote the production of the inventions of others, rather than foster innovation itself. Innovation policies are best when they provide stability and predictability, including in IP systems.
- However, measures such as domestic manufacturing requirements and other industrial policies, whether implemented through or alongside IP systems, can add to the risk inherent in innovation, deter capitalization, imperil the rule of law, and ultimately undermine the goal of promoting innovation.
- Localization barriers to trade can take a variety of forms, including among other things, local content requirements, subsidies contingent upon the use of local goods, mandates to purchase domestically-manufactured goods or domestically-produced services; preferences to domestic intellectual property rights holders; measures to force technology transfer and many others.
- Countries are putting these measures into place in order to meet other domestic

objectives, but these requirements have harmful consequences for trade and investment, as well as for economies' long-term economic growth goals, including innovation.

- And many countries have recognized the negative impact such policies can have on innovation. For example, in November 2011, Leaders of the economies in the Asia Pacific Economic Cooperation (APEC) forum meeting in Honolulu committed to implement policies that promote effective, non-discriminatory, and market-driven innovation policy in the Asia-Pacific region.
- Specifically, APEC members agreed in Honolulu to actively enforce intellectual property rights, refrain from imposing technology transfer mandates, promote adoption of global standards, implement transparent and non-discriminatory government procurement policies; and minimize the trade-distorting impact of information and communication technology policies, including privacy and security. We commend these principles for study by interested WTO Members; they can be found on the website, www.apec.org, as Annex A to the 2011 APEC Leaders Declaration.
- In conclusion, we have outlined variety of components of an innovation strategy, including but not limited to IP protection. With the assistance of the IP system, our scientists and researchers can see their important innovations developed into the new medical treatments, plant varieties, energy efficient technologies, and communications equipment that will be needed in the future.
- We look forward to hearing from others as to what measures they are taking to help innovation flourish, and the role of intellectual property in supporting innovation, in the hope that we can learn from each other's experiences, and that we can all benefit from the innovation that results.
- Thank you, Mr. Chairman.