My testimony today will focus on the following topics.

1. The WTO TRIPS Agreement has largely shut off the supply of inexpensive versions of new drugs.

The most important effect has been to change the India patent law. Since 2005, when India began to issue patents on pharmaceutical products, the government of India has issued only a single compulsory license on a drug patent, for the Bayer patents on Nexavar, an expensive drug for liver and kidney cancer. Under pressure from the United States, India has failed to issue compulsory licenses on other even more expensive cancer drugs, and the supply of other life saving drugs has been reduced as a consequence of the WTO TRIPS agreement.

2. The proposal to apply non-violation complaints to the TRIPS Agreement will narrow the scope of exceptions and the risks of dispute resolution will make governments more reluctant to use exceptions.

The United States has robust exceptions for copyright, and this is important for both users and the US Internet services industry, which is the largest in the world. Changes in the way the TRIPS Agreement is administered can leave the United States vulnerable to new challenges in our copyright laws that would harm U.S. interests.

3. Already many countries in Europe have implemented or are considering auxiliary copyright type laws that appear to eliminate two mandatory user rights in the Berne Convention, including:

   Article 2(8) The protection of this Convention shall not apply to news of the day or to miscellaneous facts having the character of mere items of press information.

   And,

   Article 10(1) It shall be permissible to make quotations from a work which has already been lawfully made available to the public, provided that their making is compatible with fair practice, and their extent does not exceed that justified by the purpose, including quotations from newspaper articles and periodicals in the form of press summaries.
The United States might consider exploring whether or not ancillary copyright laws such as the one implemented recently in Spain constitute technical barriers to trade under the WTO agreement.

The focus on ancillary copyright laws also can be understood as a response to a different problem -- the fact that some Internet and computer software companies, like Google, Microsoft and Facebook, look like monopolies, and are reported to be major evaders of income taxes, as are many highly profitable pharmaceutical companies. In this respect, one shortcoming of trade agreements is that they have failed to or even avoiding making it easier to tax giant corporations, including by considering such mechanisms as global unitary income taxes.

4. All of these problems are made worse by the fact that some trade agreements have included provisions to radically change global standards for damages relating to the infringement of intellectual property rights.

For example, note that on page 18-23, in the KORUS FTA IP Chapter section on Civil and Administrative Procedures and Remedies¹, there are obligations that:

5 (a) in civil judicial proceedings, its judicial authorities shall have the authority to order the infringer to pay the right holder: (i) damages adequate to compensate for the injury the right holder has suffered as a result of the infringement;[28] or (ii) at least in the case of copyright or related rights infringement and trademark counterfeiting, the profits of the infringer that are attributable to the infringement, which may be presumed to be the amount of damages referred to in clause (i); and

(b) in determining damages for infringement of intellectual property rights, its judicial authorities shall consider, inter alia, the value of the infringed good or service, measured by the market price, the suggested retail price, or other legitimate measure of value submitted by the right holder.

In addition, the KORUS FTA has additional obligations, including in particular and most regrettable for copyright goods.

The standards on damages in the KORUS FTA are contrary to U.S. law, particularly as they relate to U.S. limitations on damages for patents involving biologic drugs, nuclear power technologies and use of patented inventions by physicians and other health care providers, and they are at odds with the policy advice adopted by the DOJ and the FTC as regards to standards essential patents (SEPs). The KORUS FTA standards of damages for copyright are inconsistent with the proposal in June 2015 by the U.S. Register of Copyrights to limit remedies

for infringement of orphan copyrighted works, and important issue that will determine the economic feasibility of using the photographs, recordings and written documents from our past.

5. The 2012 report by the Department of Commerce's Economics and Statistics Administration and the United States Patent and Trademark Office *Intellectual Property and the U.S. Economy: Industries in Focus*², has become a propaganda tool for drug companies and publishers seeking to expand the rights associated with patents and copyrights. But when one reads the report, it is clear that the people quoting it are seeking to exaggerate the employment associated with their sectors.

KEI explored these issues when the report was first issued, in a June 6, 2012 comment titled: The USPTO/DOC's liberal and misleading definition of IP-Intensive industries is designed to influence policy debates. [http://keionline.org/node/1432](http://keionline.org/node/1432)

As noted in our 2012 commentary, the USPTO and DOC ramped up the employment numbers by including a very liberal definition of IP-Intensive industries. To appreciate how liberal, it is useful to spend some time on Table 10, which is found on pages 36-38 of the report. More than 83 percent of all reported IP-Intensive jobs come from the trademark sector, where the mere existence of a brand name somewhere in the value chain makes the industry count as "IP-intensive." Most of the jobs have nothing to do with anything remotely connected to IP policy debates.

According to the report, the number one IP intensive industry in terms of employment is “grocery stores,” with 2.5 million jobs. The six industries with more than a million jobs are the following:

1. Grocery stores, 2.5 million
2. Depository credit intermediation, 1.7 million
3. Computer systems and designs, 1.6 million
4. Insurance carriers, 1.4 million
5. Management and technical consultants, 1.2 million
6. Clothing stores, 1.1 million

Only one of these, Computer systems and designs, can honestly be described as an IP-intensive industry, in the sense that the Congress is seeking to understand the relationship between IP and employment.

These are just a few of the industries the Department of Commerce calls IP-Intensive: Oil and gas extraction, Residential building construction, Grain and oilseed milling, Dairy product manufacturing, Lessors of real estate, Gambling industries, Household and institutional furniture, Pulp, paper, and paperboard mills, Sporting goods and musical instrument stores,

Travel arrangement and reservation, etc. Industries like these overwhelm the statistics on jobs for the more legitimate choices, such as Sound recording industries, software publishers, or drug companies. Note that in 2014, the BLS estimated only 16 thousand jobs in the sound recording sector.\(^3\)

Consider also for moment the BLS data on key occupations in the area of computer programing and software, where high skilled and highly paid jobs are an important benefit to the U.S. economy.

- 11 percent of Computer and Information Research Scientists are employed by software publishers, but 89 percent are employed elsewhere. [http://www.bls.gov/oes/current/oes151111.htm](http://www.bls.gov/oes/current/oes151111.htm)
- Less than 10 percent of Software Developers for Applications are employed by software publishers. [http://www.bls.gov/oes/current/oes151132.htm](http://www.bls.gov/oes/current/oes151132.htm)
- 7 percent of computer programmers are employed by software publishers. 93 percent are employed elsewhere. [http://www.bls.gov/oes/current/oes151131.htm](http://www.bls.gov/oes/current/oes151131.htm)
- 5.5 percent Software Developers for Systems Software work for software publishers, and 94.5 percent work elsewhere. [http://www.bls.gov/oes/current/oes151133.htm](http://www.bls.gov/oes/current/oes151133.htm)
- 2.5 percent of web developers are employed by software publishers while 97.5 percent elsewhere. [http://www.bls.gov/oes/current/oes151134.htm](http://www.bls.gov/oes/current/oes151134.htm)

In other key sectors of the information economy, like database services, the role of software publishers is much smaller.

Where are these highly skilled computer and software jobs located, and how do they relate to copyright or patent policy? Most are at work designing custom applications for businesses and consumers, in areas where 95 year copyright terms are irrelevant, and software patents are a problem not a protection. These professionals are big users of free software tools, running Linux based servers, and using free software platforms and programs like R, Drupal, Wordpress, Python, the GNU Compiler Collection, etc. The fact that the free software movement does not have a strong DC based lobby does not mean it does not exist, or that it does not create value and jobs in the United States.

6. Making drug prices higher should not be the main priority for trade negotiators. Increasing R&D funding is more important.

\(^3\) [http://www.bls.gov/oes/current/naics4_512200.htm](http://www.bls.gov/oes/current/naics4_512200.htm)
The United States provides a 50 percent tax credit for the development of Orphan Drugs. In 2014, 9 of the 10 new cancer drugs qualified for this deep subsidy of their drug development costs. No other countries offers such tax credits. U.S. trade agreements could seek to expand the role of other governments in subsidizing R&D through the measures undertaken in the orphan drug act or by the National Institutes of Health (NIH). If we focused on increasing public sector funding of R&D, subsidies like the orphan drug tax credit, and new incentives like innovation inducement prizes, we can also take measures to control and lower drug prices, without harming innovation. This is the path not taken by trade negotiators, and it is killing people, literally.

The ITC should take stock of the proposals at the World Health Organization to begin negotiations on a new agreement on funding priority medical R&D, based upon the delinkage of R&D costs from product prices. Governments need to support this approach, rather than the policies that are contributing to life shortening price increases for medical inventions.