Trude Amick
Penn Center for Innovation
Director, Engineering, Physical and Applied Science

trude@penn.edu
215-573-4509
www.pci.upenn.edu
• Objective of Y-Prize is to identify and develop new applications and/or markets for existing technologies.

• There may be existing intellectual property owned by Penn that would be required for commercializing a product or service based upon the Penn technology

• Patents, Copyright, and Y-Prize License
Intellectual Property

Trademark protects words, names, or symbols used in commerce

Copyright protects original works of authorship

Patent protects process, machine, article of manufacture, or composition of matter
What is a Patent?

...is a property right created by law to protect intangible assets.

To be patentable, an invention must be statutory, new, useful, non-obvious, enabled, described, work of inventors.
Statutory

Patentable Subject Matter

- Process
- Machine
- Article of manufacture
- Composition of matter
- Improvement of any of the above

Note: In addition to utility patents, encompassing one of the categories above, patent protection is available for (1) ornamental design of an article of manufacture or (2) asexually reproduced plant varieties by design and plant patents.
What is NOT Patentable

- Laws of nature
- Physical phenomena
- Abstract ideas
- Literary, dramatic, musical, and artistic works (these can be Copyright protected).
- Inventions which are:
  - Not useful (such as perpetual motion machines); or
  - Offensive to public morality
Novel—Not known, published, used publicly, or offered for sale more than one year prior to the filing date.

Most other countries do not have the one year limited grace period for publication as allowed by the AIA.

Non-Obvious – Not obvious to “one of skill in the art”.

Useful – Has a useful purpose and operates.
Enabled, Described, Work of Inventors

**Enablement** – Must teach others how to make and use the invention.

**Written Description** – Must describe invention in enough detail that a person of ordinary skill in the art could make it.

**Work of the Inventors**
A patent allows the owner of the patent to prevent others from making, using, selling, importing products and methods covered by the issued claims for a period of 20 years from the filing date of the patent.
Why obtain a patent?

Intangible assets are increasingly valuable.

Early 1980's: ~60% of corporate value comprised tangible assets, 40% IP and other intangible assets.

Today: ~15% of corporate value comprises tangible assets, 85% IP and other intangible assets.

Batteries that charge in minutes, but power a device for hours.

A surface that sticks when you want it to, then lifts on command.

A super-strong, super-conductive material that’s *one* atom thick.
Batteries that charge in minutes, but power a device for hours.

(Dr. Mark Allen)

This technology was developed and published by Dr. Allen when he was at Georgia Tech. No patent applications were filed by Georgia Tech. There is no patent protection available since its been more than 1 year since the public disclosure.
A surface that sticks when you want it to, then lifts on command.

(Dr. Kevin Turner)

This technology was developed by Dr. Turner at Penn. Penn filed a provisional patent application for this technology.

PCI will grant winning Y-Prize team a non-exclusive license to the patent rights in the field of use.
A super-strong, super-conductive material that’s one atom thick—graphene.

(Dr. Charlie Johnson)

Penn has filed many patent applications covering Dr. Johnson’s graphene technology. Penn has exclusively licensed its graphene patent portfolio to Graphene Frontiers.

Mike Patterson, CEO Graphene Frontiers will work with PCI to make any necessary IP non-exclusively available to Y-Prize winning team.
NEW INTELLECTUAL PROPERTY

If the Y-Prize team and Penn advisors develop new intellectual property (IP) during the Y-Prize, we will meet and determine the ownership of such new IP in accordance with Penn’s Patent Policy.

PCI will grant winning Y-Prize team a non-exclusive license to the Penn’s IP rights in the field of use.
A license agreement is the mechanism by which the owner of the patent grants another party (company) the rights to practice the claimed invention.
General Patent Information

- [http://www.uspto.gov/inventors/](http://www.uspto.gov/inventors/)
- [http://www.uspto.gov/patents/resources/general_info_concerning_patents.jsp](http://www.uspto.gov/patents/resources/general_info_concerning_patents.jsp)
- [http://www.uspto.gov/patents/process/index.jsp](http://www.uspto.gov/patents/process/index.jsp)
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