

Introduction to Intellectual Property (IP)

adapted from



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Intellectual Property Overview

IP refers to **creations of the mind** – creative works or ideas embodied in a form that can be shared or can enable others to recreate, emulate, or manufacture them.

There are four ways to **protect intellectual property**:

Trademark – Protects marks in commerce that indicate the source or origin of goods or services

Copyright – Protects original (art) works fixed in a tangible medium

Trade Secret – Protects commercially valuable information

Patent – Protects inventions

Trademarks

Allow consumers to **identify the source or producer** of different products and services – helps buying decisions

Encourage trademark owners to provide goods and services of **consistent quality** and to build goodwill in the trademark

Trademarks can be **words or design**

Trademarks can be used with **registration** ® or **without registration** ™

STARBUCKS



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Gracious Professionalism®

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The Ultimate Sport for the Mind™

Copyright

Protects **original works of authorship** including literary, dramatic, musical, artistic, software and other works fixed in a tangible medium

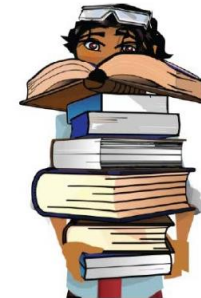
Copyright protection is secured automatically upon creation. A work is “created” when it is fixed in a copy for the first time.

© symbol can be used without registration

Things protected by copyrights



Songs



Books



Movies



Sculptures

Trade Secrets

Any information that **derives economic value** from not being generally known

Can be formulas, patterns, compilations, programs, devices, methods, techniques or processes

Trade secrets are not generally known and must be subject to **reasonable efforts to preserve confidentiality**

No set term for protection



Patents

A **property right** granted by the United States government to an inventor, no world-wide patent

To **exclude others** from making, using, offering for sale, or selling the invention throughout the US or importing the invention into the US

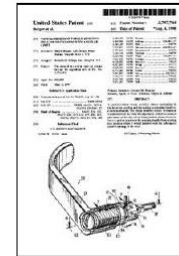
For a **limited time**

Government grants the property right in exchange for the **disclosure of the invention**

Types of patents

Utility

New and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof



Design

Any new, original and ornamental design; protects the way an object appears



Plant

Whoever invents or discovers and asexually produces any distinct and new variety of plant



Provisional patent can be filed for less than \$500 and it must be converted to a **utility** patent within 1 year from **public disclosure**.

Overview of IP: a mobile phone

Trademarks:

- Made by “Google” (logo)
- Product “Pixel”
- Software “Android”, “Chrome”
- Processor “Snapdragon”

Copyrights:

- Software code
- Instruction manual
- Ringtone

Trade secrets:

- Google Search algorithm

Utility Patents:

- Camera
- Semiconductor circuits
- Display
- Battery/Power Control
- Speaker

Design Patents:

- Form of overall phone
- Placement of button & speaker
- Device Housing
- Surface finish



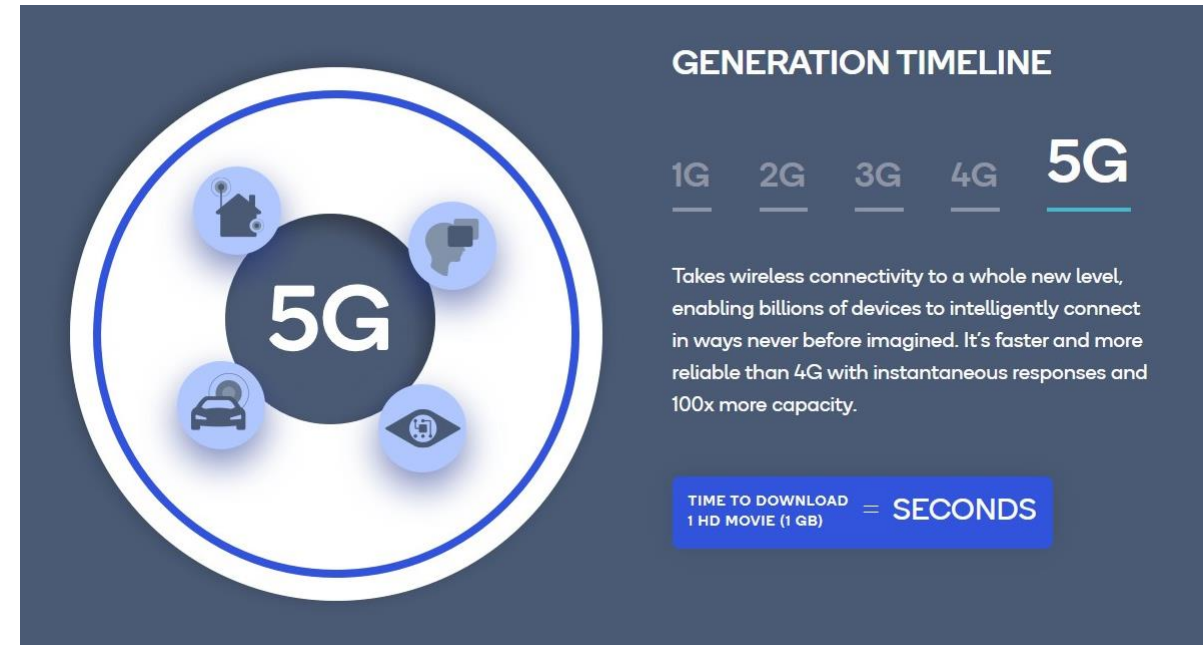
Qualcomm Innovation → Inventions → Patents

5G is far more than just another mobile generation, as it enables innovations

Inventions that go into the 5G standards are protected by patents.

Without the protection of a robust patent system, inventors, entrepreneurs, academics, and investors could not innovate and bring new technological breakthroughs to market.

The 5G standard was developed by an international community with Qualcomm being the only US company.



**Qualcomm thank you for leading innovation and
bringing the Innovation Challenge to
FIRST Tech Challenge & FIRST Robotics Competition!**

Additional Resources on Patents

- U.S. Patent and Trademark Office Learning Resources
 - Materials today were adapted from the [USPTO](#) by CC BY-NC-SA 4.0
 - More free resources available from [Silicon Valley Regional USPTO](#)
- Additional opportunities **designed for *FIRST* students**
 - Feb 6th *FIRST* California Workshop Series – Plunge into Patents
 - [FIRST Innovation Challenge Content Series](#) episodes in March:
 - Demystifying Intellectual Property
 - Patent Education with the USPTO

Session 1: Strategy & Navigation

wrap-up and prepare for

Session 2: Ideation

Thanks for joining us & see you next Saturday!

| Strategy & Navigation | Ideation |
|---|---|
| Identify the Opportunity | Generate Ideas |
| <ul style="list-style-type: none">• Evaluate the Innovation Challenge Criteria• Design Thinking - Empathy & Define• Problem Statement• Intellectual Property intro | <ul style="list-style-type: none">• Design Thinking - Ideate• Brainstorming• Diversity & Inclusion of Ideas |
| Jan 9 th , 1-3pm | Jan 16 th , 10am-Noon |

- **Homework**
 - Develop your Problem Statement
 - Bring a diverse set of team members to next week's session
- **Session 2: Ideation**
 - Saturday Jan 16th, 10am – 12pm
 - Brought to you in partnership with



- **Questions for Áine Shivnam – stay on**