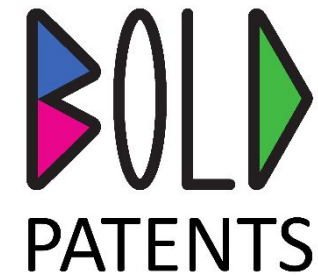# Intellectual Property Law & Virtual Reality / Augmented Reality

J.D. Houvener, ESQ, MBA,
Founder of Bold IP, PLLC
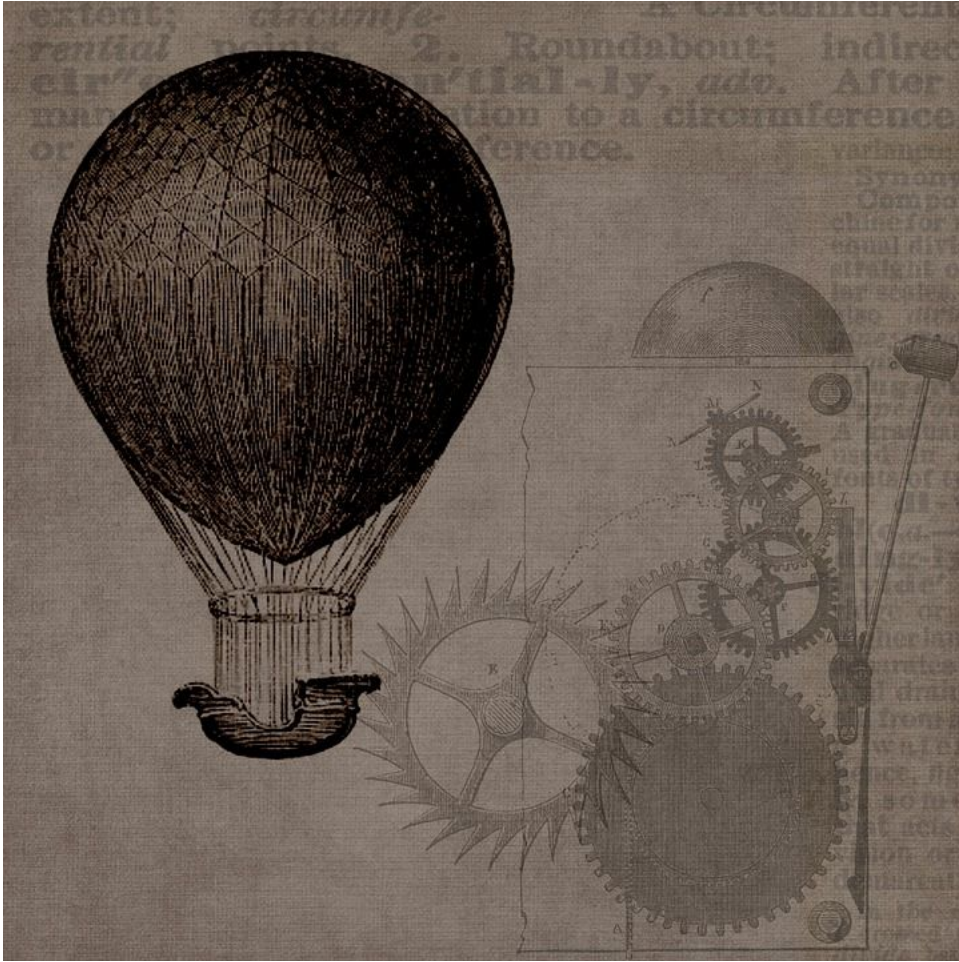
July 8th, 2020

www.BoldPatents.com

The 4 Pillars of IP

- Patents
- Copyrights
- Trademarks
- Trade Secrets

Patent Law: Fundamentals

Patent Law Premise

A Patent gives an inventor the right to exclude others from making, using, selling, or importing the invention into the US (or other countries) for a period of 20 years from the date of filing.
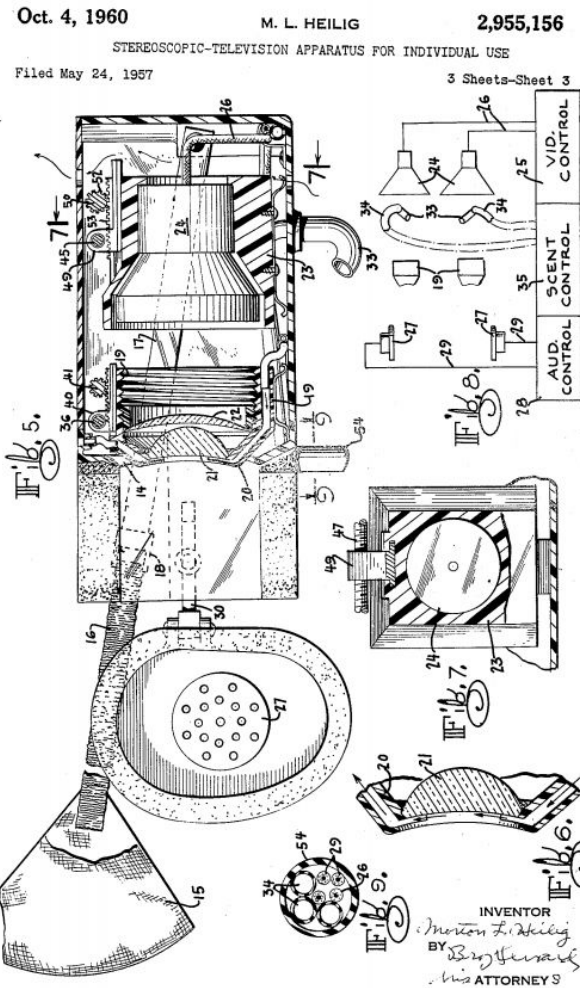
Does My Invention Qualify?

Test for Patent Eligibility:

- Machine (e.g. Apparatus)
- Manufacture (e.g. Assembly)
- Composition of Matter (e.g. Chemical)
- Process (e.g. Method)

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The First Virtual Reality Patent 2,955,156

Oct. 4, 1960 M. L. HEILIG 2,955,156
STEREOSCOPIC-TELEVISION APPARATUS FOR INDIVIDUAL USE
Filed May 24, 1957 3 Sheets-Sheet 1

Oct. 4, 1960 M. L. HEILIG 2,955,156
STEREOSCOPIC-TELEVISION APPARATUS FOR INDIVIDUAL USE
Filed May 24, 1957 3 Sheets-Sheet 3

INVENTOR
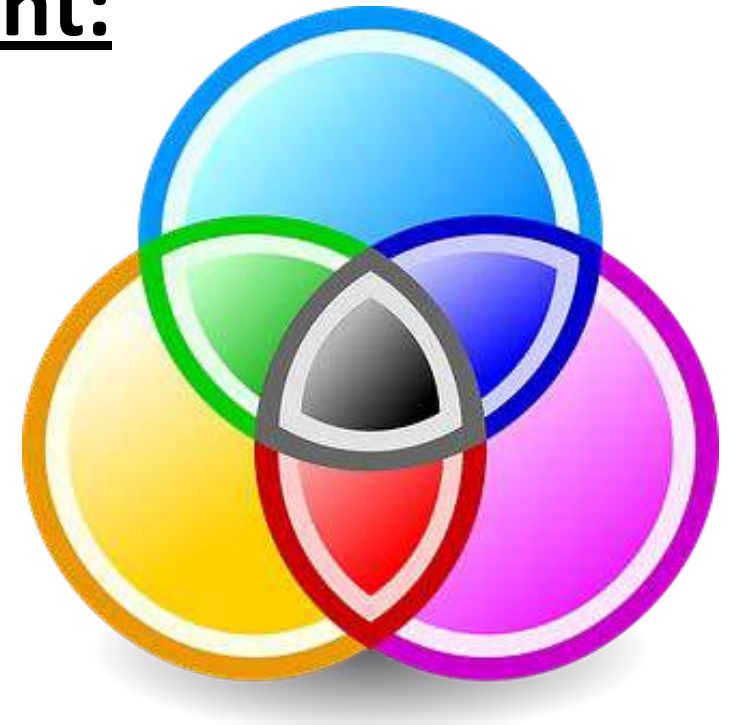Morton L. Heilig
BY
his ATTORNEYS

Claim:

A stereoscopic television apparatus for individual to use comprising an enclosed, hollow casing, one portion of said casing being concave to fit about the face of a wearer, said one portion having two eye openings, means to mount said casing on the head of a wearer with said eye openings in position to be looked through by the wearer, two television units mounted within said casing so that one television unit is visible through each of said eye openings, and an optical unit mounted in each of said eye openings whereby peripheral light from said television units enters the eyes of the wearer to create a sensation of peripheral vision of approximately 140 degrees.

How do I get a Patent?

Three requirements to get a patent:

- Novelty
- Non-obviousness
- Utility

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Are there Different Types of Patents?

<u>Three Types of Patents</u>

- Utility
- Design
- Plant

Recent Augmented Reality Patent 10,675,766

(57)

ABSTRACT

A system for providing a user of a virtual reality (VR) system with physical interactions with an object in the real world or in the surrounding physical space while they are concurrently interacting in the virtual world with a corresponding virtual object. The real world object is dynamic with the system including a physical interaction system that includes a robot with a manipulator for moving, positioning, and/or orienting the real world object to move it into contact with the user. For example, the physical object is moved into contact with a tracked body part of the user at a time that is synchronized with a time of an interaction event occurring in the virtual world being created by the VR system. Further, a system is described for providing a dynamic physical interaction to a human participant, e.g., a fast and compelling handover in an augmented reality (AR) system.

We claim:

1. A system for providing a dynamic physical interaction to a human participant, comprising:

a VR system including a headset with a display screen and a VR rendering module generating a video output, wherein the display screen displays an image of a virtual world based on the video output; and

a physical interaction system comprising a robotic mechanism and a robot control module generating commands for operating the robotic mechanism to selectively position a physical object within a space,

wherein a wearer of the headset is positioned in the space,

wherein the image of the virtual world includes an image of a virtual object corresponding to the physical object, and

wherein the commands generated by the robot control module cause the robotic mechanism to move the physical object in the space based on a state of the virtual object in the virtual world to cause a physical interaction between the physical object and the wearer in a time synchronized manner suited to the state of the virtual object in the virtual world.

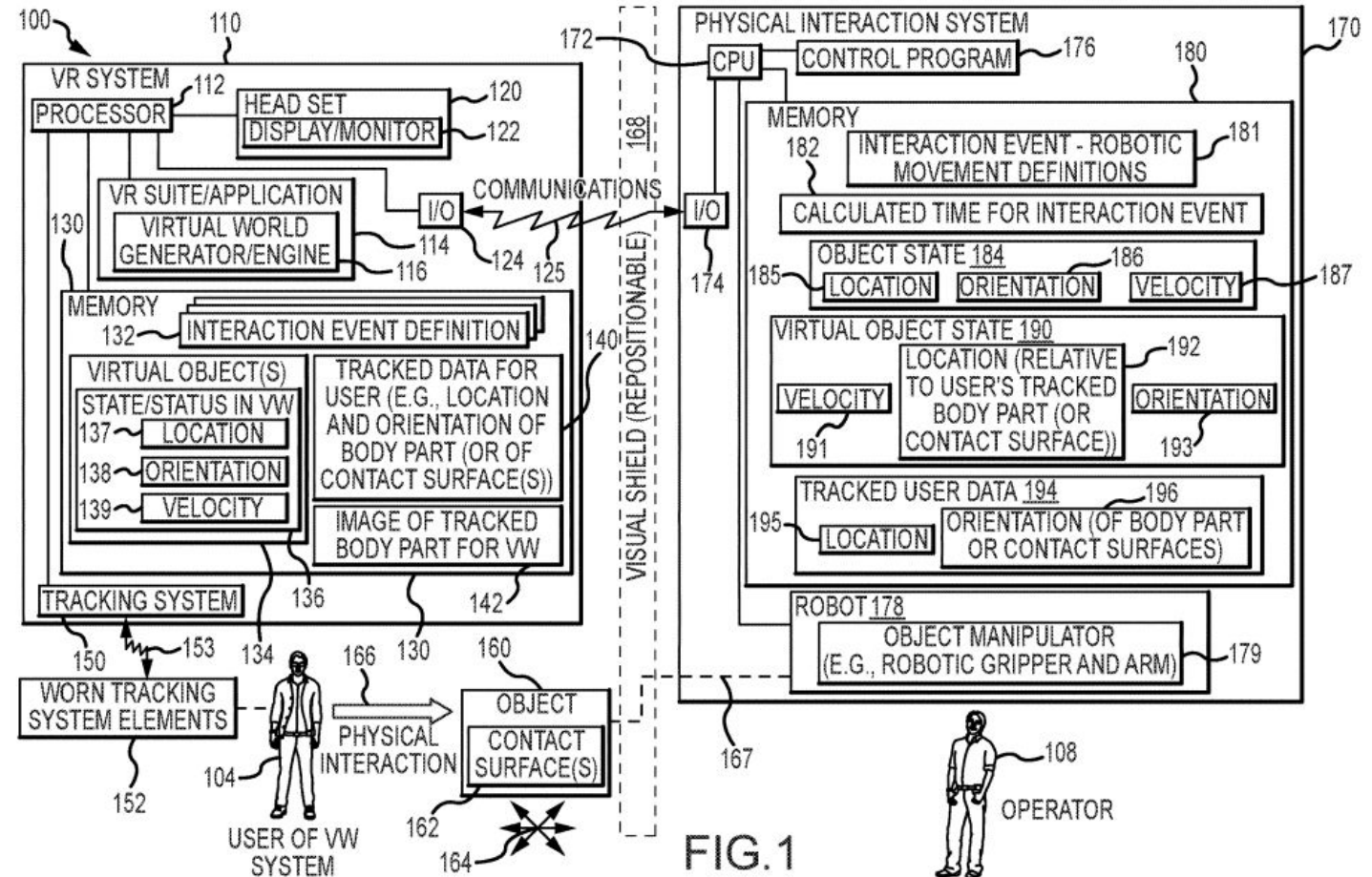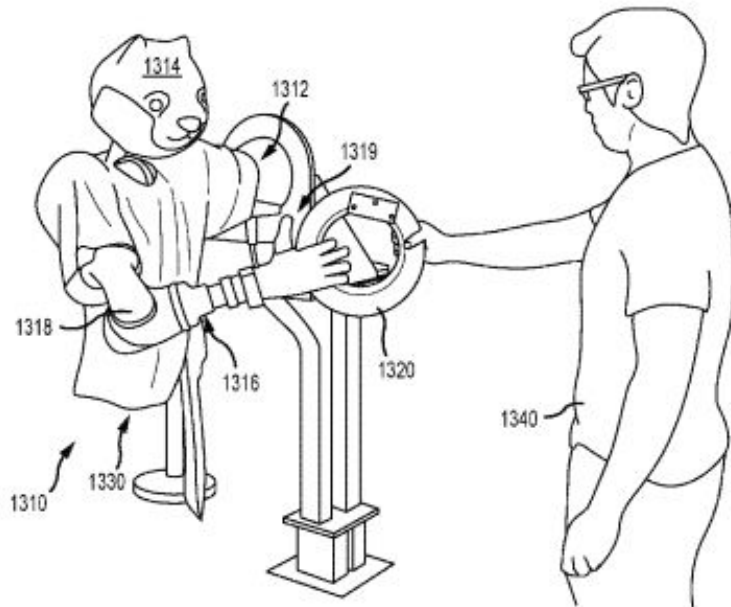www.BoldPatents.com

Recent Augmented Reality Patent [10,675,766](#)

Implications of America Invents Act (AIA) of 2013

Three Main Law Changes

- First to File instead of First to Invent
- Worldwide Prior Art
- Patent Trial and Appeal Board (PTAB)

What Timing Considerations are There?

Statutory Bars & Considerations

- Pre-Filing Sales and Offers
- Pre-Filing Disclosures
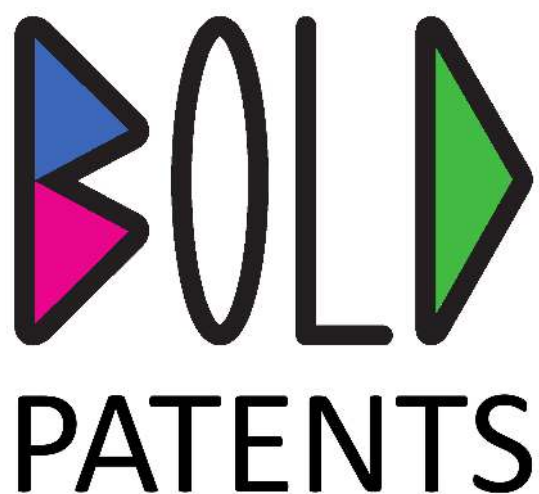- Non-Disclosure Agreements
- Nonprovisional Reference

What if Someone Infringes on My Patent?

Mechanisms for Enforcement

- Validity Opinion
- Infringement Opinion
- Cease & Desist
- Settlement
- Arbitration
- PTAB
- Federal Court/ITC

BOLD PATENTS
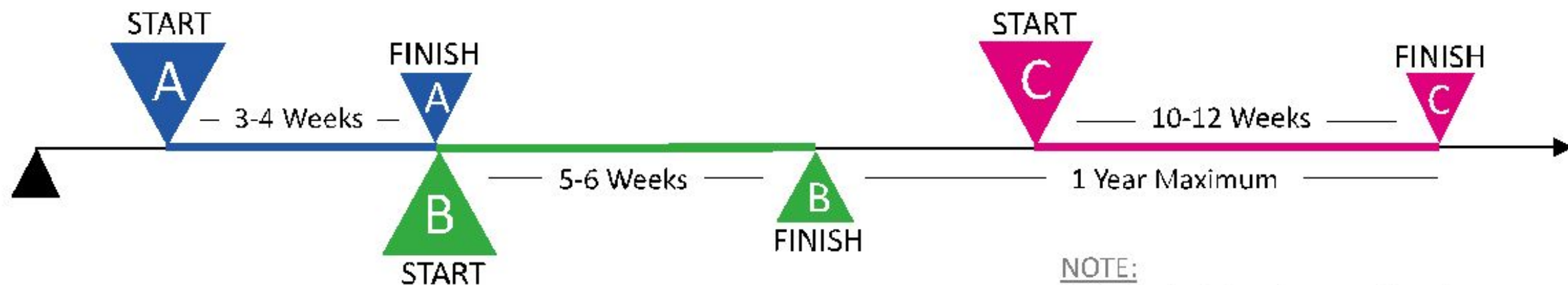
Simplified A-B-C Patent Application Process Flow

Patentability Search:
- Takes 3-4 Weeks
- Answer on Patentability/Scope
- Recommended Path Forward

Nonprovisional Patent Application:
- Takes 10-12 Weeks
- Update Specification/Drawings
- Draft Claim Language

START A — FINISH A — 3-4 Weeks

START B — 5-6 Weeks — B FINISH

START C — 10-12 Weeks — FINISH C

1 Year Maximum

Initial Consultation:
- Eligibility Issues
- Inventorship/Ownership
- Long-Term Business Goals

Provisional Patent Application:
- Takes 5-6 Weeks
- "Patent Pending" status
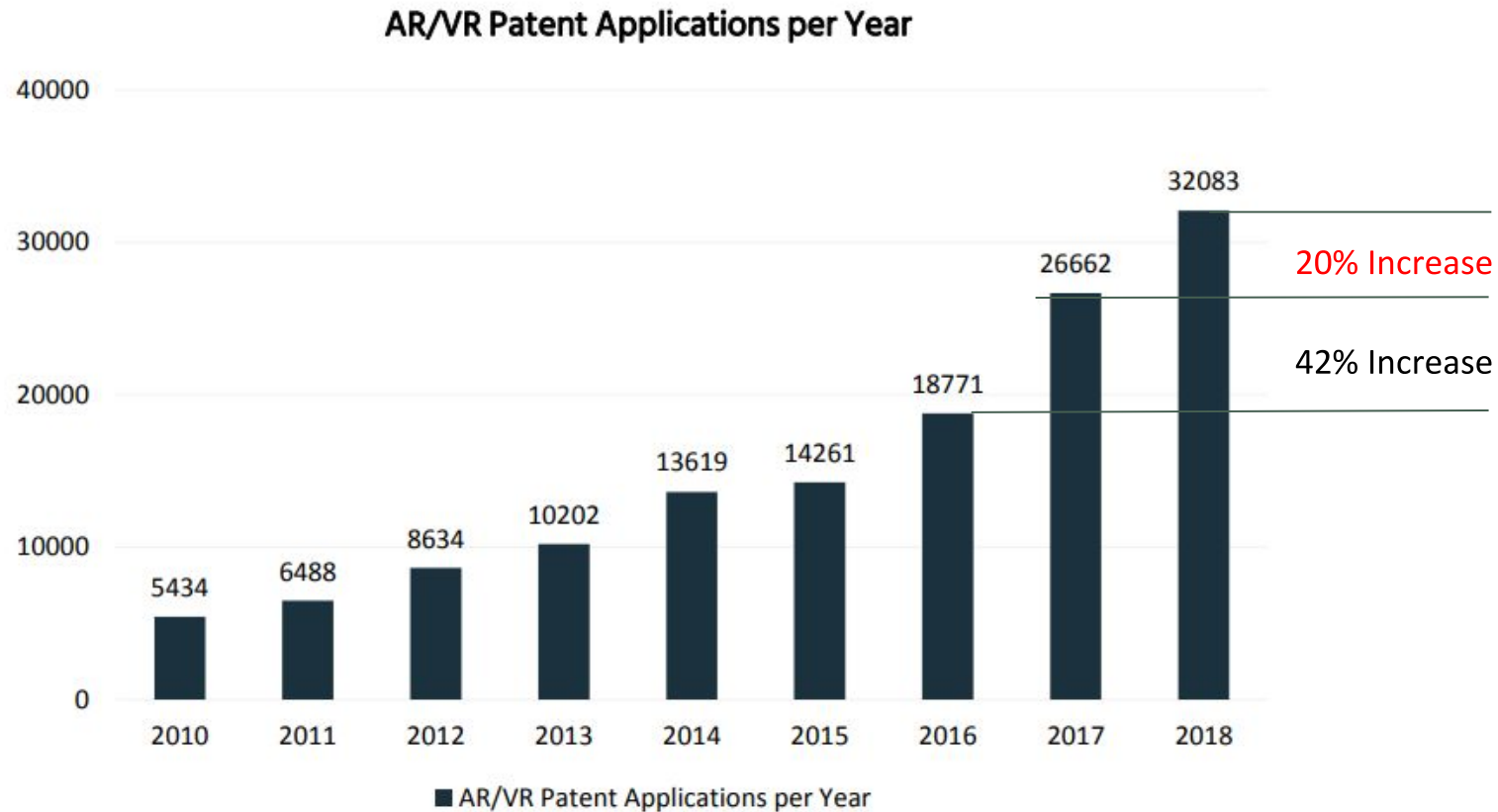- Develop *Enabling* Disclosure

NOTE:
Submittal of the Nonprovisional Patent Application "C" must be done within 1 year of submittal of the Provisional Patent Application "B" date.
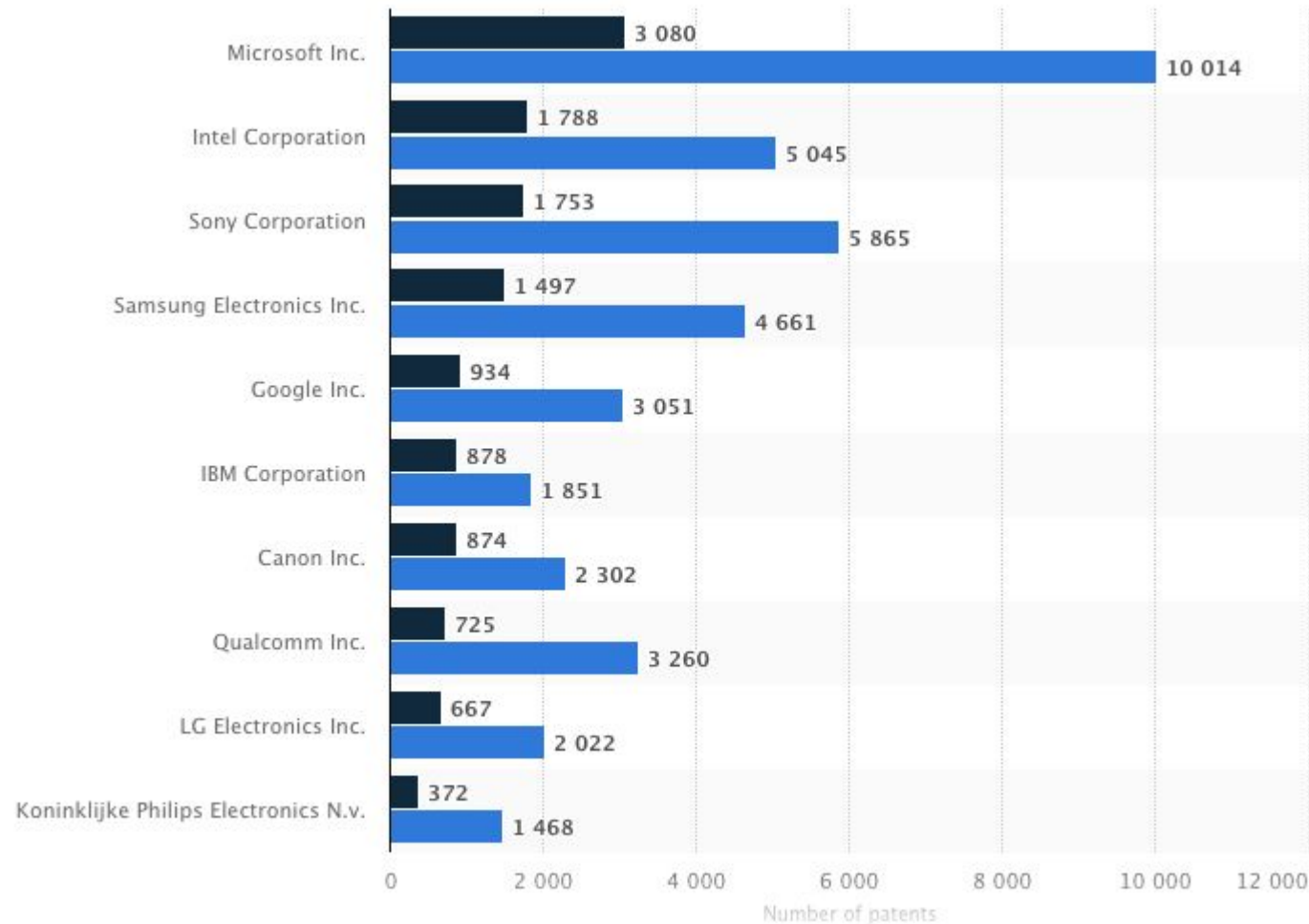
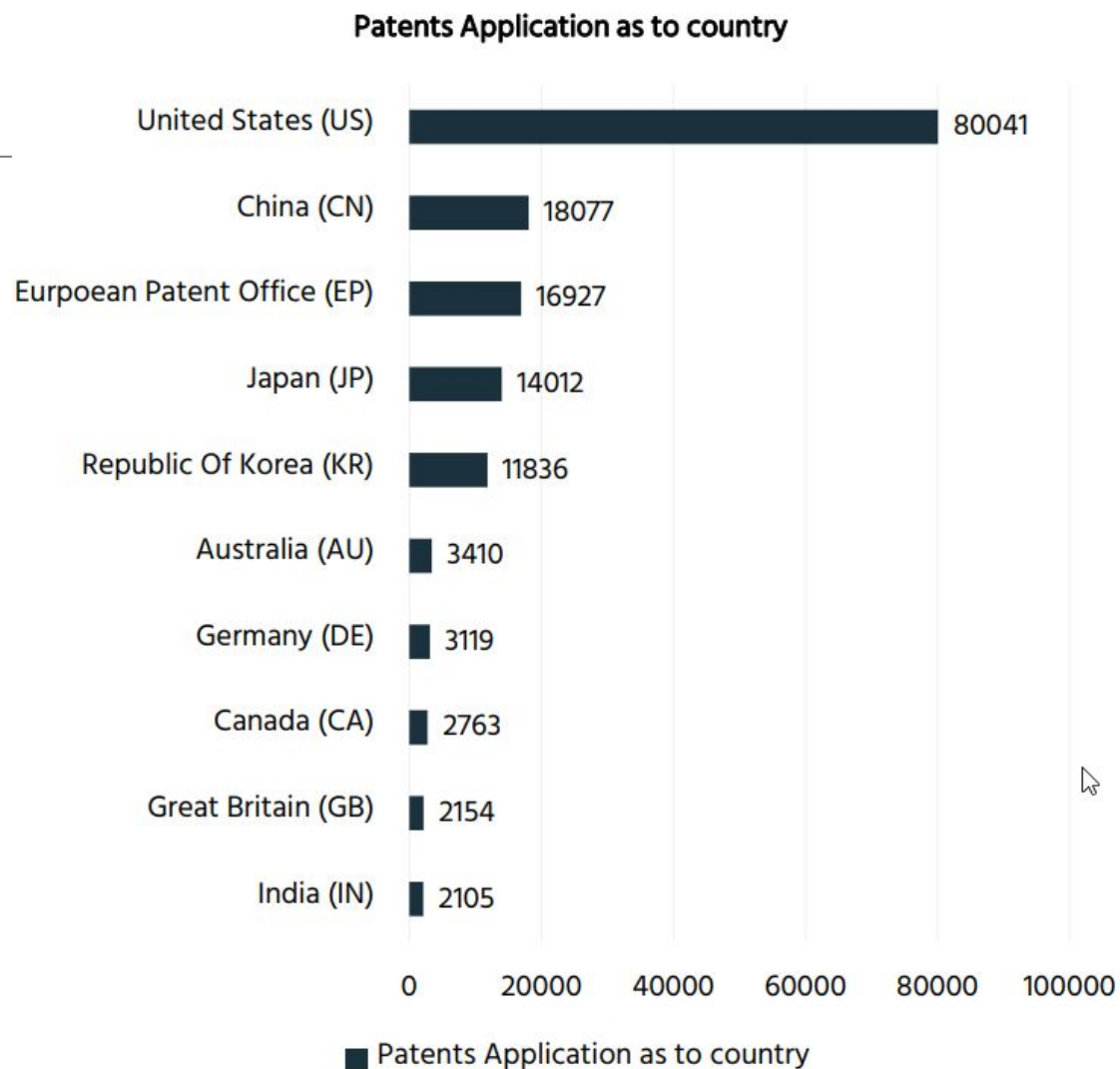# VR/AR Patent Statistics:

Patent Applications Filed in USPTO

AR/VR Patent Applications per Year

Source:
https://www.iplytics.com

Top US Patent Owners (Issued)

www.BoldPatents.com

Source: Statista.com

Patent Applications Filed By Country

Patents Application as to country

Country	Applications
United States (US)	80041
China (CN)	18077
Eurpoean Patent Office (EP)	16927
Japan (JP)	14012
Republic Of Korea (KR)	11836
Australia (AU)	3410
Germany (DE)	3119
Canada (CA)	2763
Great Britain (GB)	2154
India (IN)	2105

■ Patents Application as to country

Source:
https://www.iplytics.com

Trade Secret Law

Trade Secret Law Premise

A Trade Secret is confidential information that is valuable, not readily ascertainable and is kept secret from the public. State and Federal laws allow enforcement against those individuals who steal/misappropriate them.
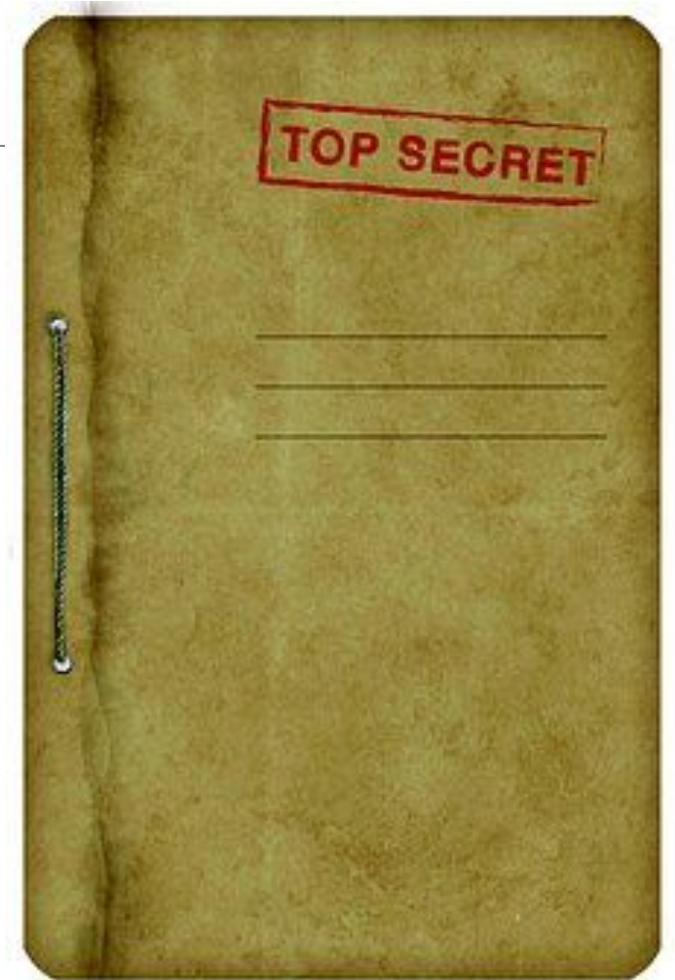
Do I Have a Trade Secret?

3-Part Test for Trade Secret Protection:

- Not Readily Ascertainable
- Efforts to Keep Secret
- Economically Valuable

What Can Trade Secrets Be?

Common Types of Trade Secrets:

- Customer Data
- Business Processes
- Manufacturing Methods
- Formulas and Processes
- Software

When Do Trade Secrets Get Discussed?

When To Think About Trade Secret

- Employment Agreements
- Nondisclosure Agreements
- Employee Exit Interviews
- Computing Security (Virtual)
- Office Security (Physical)

How Do I Enforce Trade Secrets?

Remedies for Misappropriation:

- Employee Monitoring
- Settlement/Arbitration
- State Court (Under State Statute)
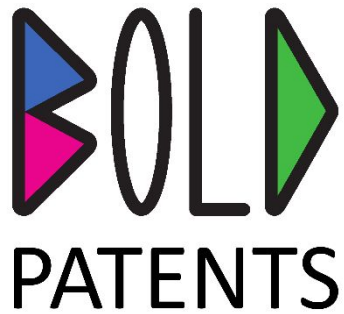- Federal Law (Defend Trade Secrets Act)

Uber and Waymo have reached a settlement in their trade secrets lawsuit, lawyers for the companies told a federal court in San Francisco Friday morning.

Waymo, which was Google's self-driving car program, had alleged its former engineer Anthony Levandowski downloaded autonomous vehicle trade secrets and took them to Uber.

Waymo accepted a settlement offer from Uber, which agreed to a deal that includes 0.34% of Uber's equity at a $72 billion valuation, which works out to about $245 million, two sources familiar with the matter said. Waymo had initially asked for maximum damages of $1.8 billion.

Thank you! Questions?

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