









Infringement Analysis & Evidence of Use Chart

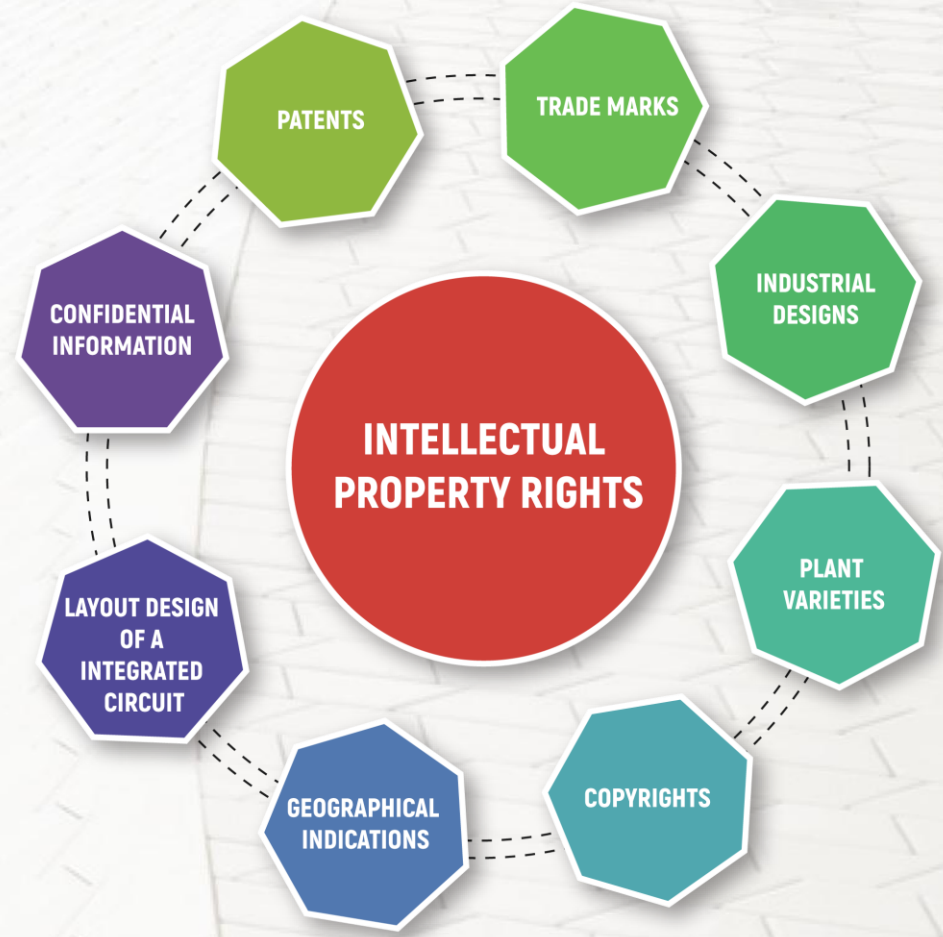
Topics to be covered

-  **Infringement**
-  **Impact of infringement on IPR Industry**
-  **Invalidity & Evidence of Use chart comparison**
-  **How to approach**
-  **Logical thinking is key in infringement analysis**

Introduction

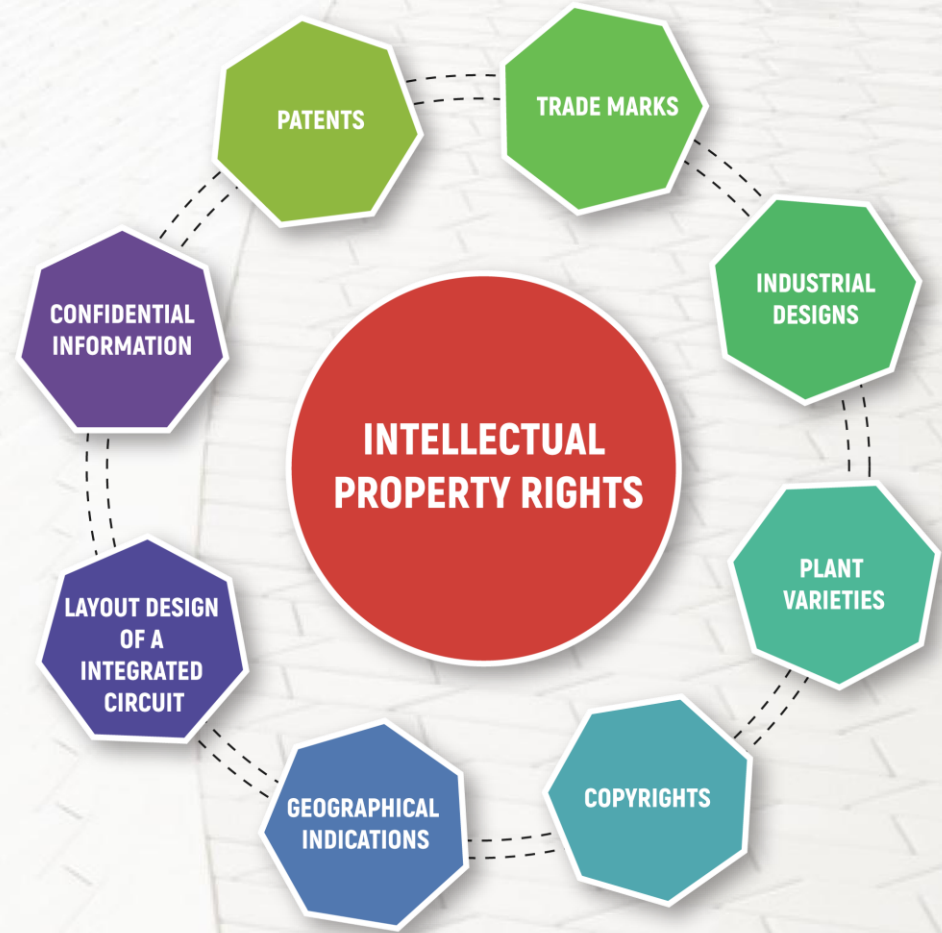
Intellectual Property Rights (IPR)

 Intellectual Property Rights (IPR) are about creations of the mind, they are granted to creators of IP, for ideas which are new and original, by the respective governments. No one can use others' IPR without their permission.



IPR is infringement driven industry*

The fear of infringement is keeping every thing organized in IPR industry



Infringement – The word not to be uttered

Infringement is most feared, hated and loved term in IPR







👉 Love it → Patent Holders

👉 Fear it → Product Manufacturers

👉 Hate it → R&D & Judiciary*

* it's a very expensive and time consuming process and that is why 99% of the cases are settled outside of the court.

INFRINGEMENT

-  The definition of patent infringement may vary by jurisdiction, but it typically includes using or selling the patented invention. In many countries, a use is required to be commercial (or to have a commercial purpose) to constitute patent infringement.
-  Typically, a party (other than the patentee or licensee of the patentee) that manufactures, imports, uses, sells, or offers for sale patented technology without permission/license from the patentee, during the term of the patent and within the country that issued the patent, is considered to infringe the patent.
-  The scope of the patented invention or the extent of protection is defined in the claims of the granted patent. In other words, the terms of the claims inform the public of what is not allowed without the permission of the patent holder.
-  Patents are territorial, and infringement is only possible in a country where a patent is in force. For example, if a patent is granted in the United States, then anyone in the United States is prohibited from making, using, selling or importing the patented item, while people in other countries may be free to exploit the patented invention in their country.

But what exactly does it mean to infringe on a patent?

- 👉 Can you do it by accident, or is it always a malicious attack to steal something that doesn't belong to you?
- 👉 Sometimes, the infringer knowingly tries to copy an existing product or process, perhaps with a minor modification to make it seem different enough to be considered a new invention.
- 👉 This comes down to a question of equivalency, which the Supreme Court defines simply: "If two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape"

What is a Patent?

A legal certificate that gives you the right to



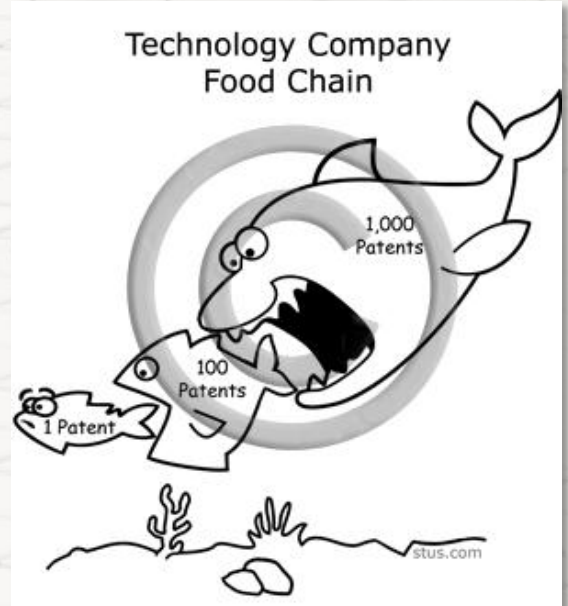
Protect Your Invention






For 20 Years



In Specific Territories



Importance of Evidence of Use Chart

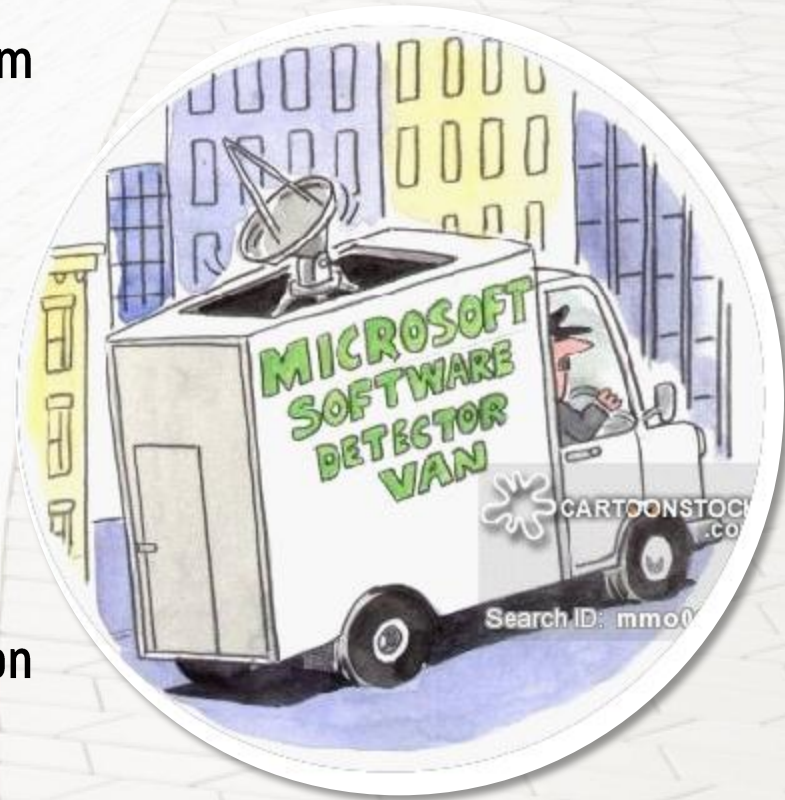
-  Evidence of Use (EoU) is a type of analysis designed to protect the IP and related interests of patent holders and investors. Its primary goals are to identify products, processes, or services in the marketplace that potentially infringe on the patent in question and to evaluate the strength of the patent assertion campaign.
-  Determining and measuring the scope of infringement is essential for future litigations, royalty earning purposes and licensing opportunities.
-  If you are selling patent assets, proof of patent infringement can assist strengthen the terms of the sale.

'Evidence of Use' chart comparison with 'Invalidity Report'

	Patent Invalidity	Evidence of Use Chart
Purpose	Either to validate the enforceability of a patent's claims or to invalidate one or more claims of a patent	Proof of infringement (Offensive)
Search Period	Prior to filing date of patent to be invalidated	The date after the Patent Enforcement came into affect
Evidence Collection	Patents and NPLs	Commercial Products
Claims	Single to All	Broadest Independent Claim
To Support Your evidence	Summary	Logical Comments
Format	Tabular form (claims on the left side and relevant text on the right side)	Tabular form (Independent claim on the left side and color coded EoU on the right side)

Approach

- 🔨 Understand the patent thoroughly
- 🔨 Relate claim terms with description (claim chart)
- 🔨 Choose the broadest independent claim
- 🔨 Do a quick priorart search
- 🔨 Starts with the product search
- 🔨 Identify potential infringement
- 🔨 Buying the infringement product in question (for reverse engineering) will be very helpful
- 🔨 Prepare a product analysis (claim mapping) chart
- 🔨 Start preparing Evidence of Use chart



Authentic Source of Evidence

🔪 Product catalogs, datasheets, blueprints, user manual etc.

🔪 Press releases

🔪 Corporate websites

🔪 Books

🔪 Standards and Regulations

🔪 Educated guess

Not Recommended

🔪 Blogs

🔪 Wikipedia

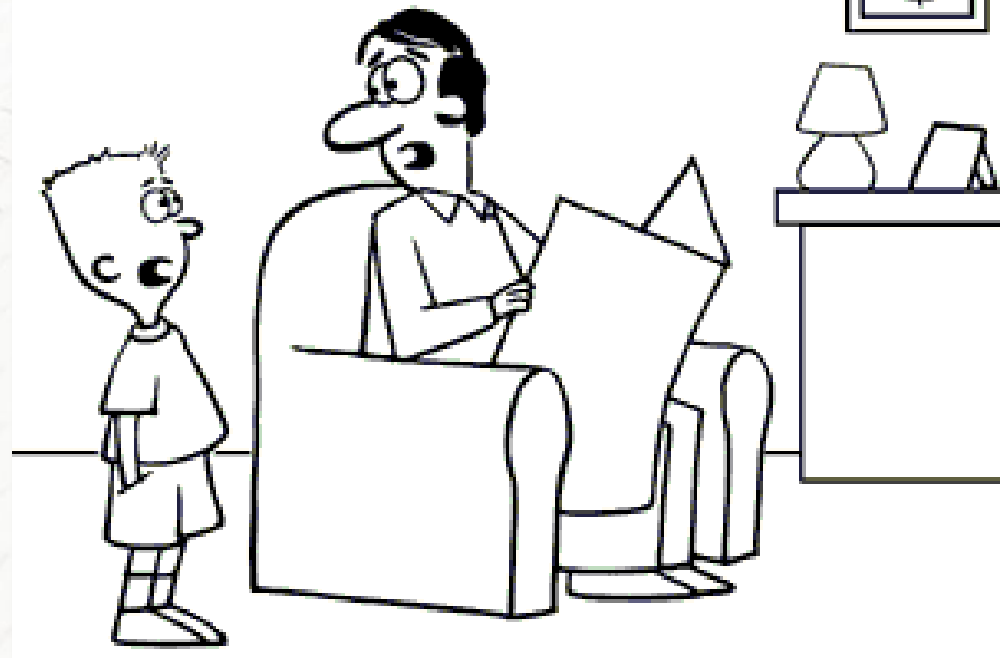
Stu's Views

© Stu All Rights Reserved www.STUS.com



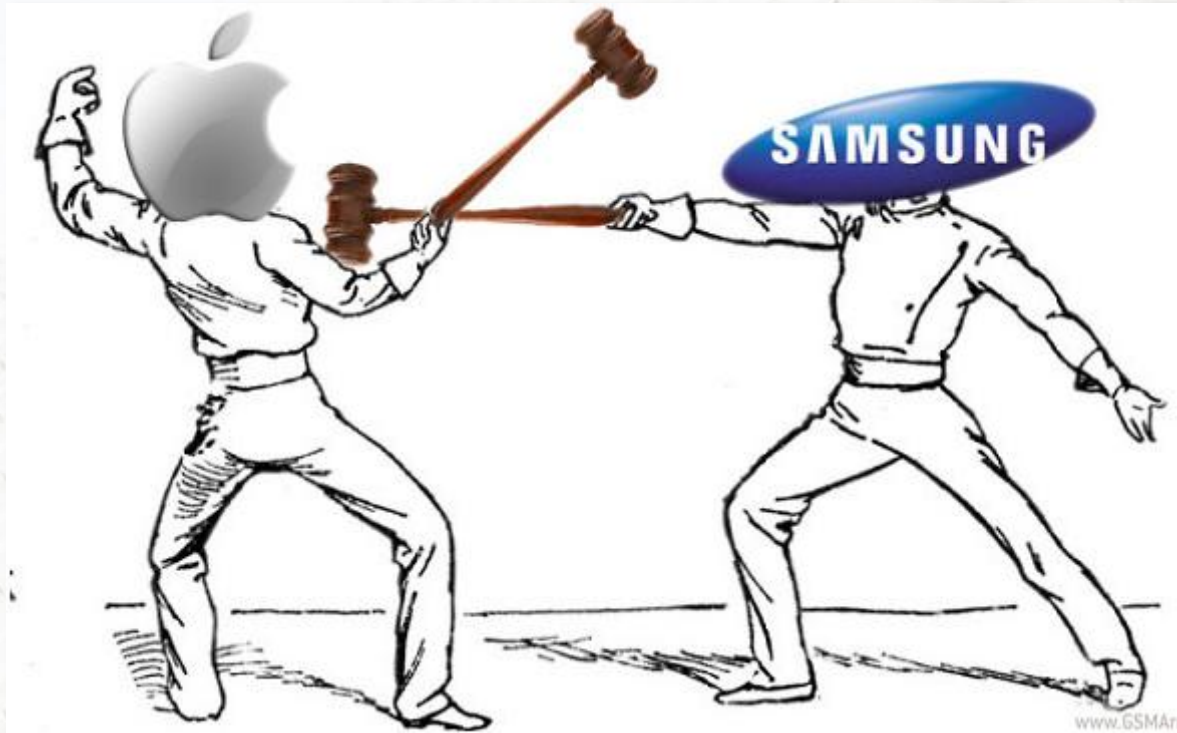
Daddy,
what's
"prior
art"?

Depends
on how good
the patent
attorney is.



Huge money and reputation is at stake

- There's a lot to win and lose when it comes to developing and selling a great idea, which is why companies remain vigilant to find cases of patent infringement and why they hire high-paid, high-powered attorneys to prosecute infringers.



- In July, 2012 a UK Court ordered Apple to post a note on its website and publish an ad in magazines and newspapers to say that Samsung did not copy Apple when it designed its own tablets.

Product analysis (claim mapping) chart



Product analysis chart gives a clear information (in a glance) if any product is reading on the subject patent and to what extent

Product \ Claim	1. A method for communicating data, comprising:	receiving a request comprising a uniform resource identifier and a header portion, the uniform resource identifier being associated with multiple content items that differ depending on information in the header portion, the request used in requesting a content item as specified by the uniform resource identifier and information in the header portion;	generating a value separate from the request using at least some of the information in the uniform resource identifier and at least some of the information in the header portion;	determining whether the content item is cached at a cache server using the value; and	retrieving the content item from the cache server if it is determined that the content item is cached.	URLs
WCCP* (predates the priority date of '698)	Y	Y	Y	Y	Y	http://userpages.umbc.edu/~dgorin1/451/caching/WebCachingChapter5InterceptionProxyin
Radware	Y	Y	N	Y	Y	http://webhelp.radware.com/AppDire
Apache HTTP Server	Y	Y	Y	Y	Y	https://httpd.apache.org/docs/2.4/programs/htcachecle
Akamai Technologies	Y	Y	Y	Y	N	https://community.akamai.com/thread/3288
Barracuda	Y	LOI	LOI	Y	Y	https://www.barracuda.com/blogs/pmblog?bid=225#.WJ3OzfrLdc https://www.barrac

Y	Matches
LOI	Lack of information
N	Doesn't match

Logic and common sense

- 👉 If the terms used in the claims are non-general then its better to define them first. Look for the definition in the patent's description itself otherwise get it from any other authentic source. This helps you to establish the correct sense of understanding and also supports the evidences in better way.
- 👉 In this case we used the definition of 'hybrid operating room' from 'Emergency Care Research Institute' website.

 <p>Legal Advantage</p>	<p>Sample Work Product</p>
<p>US X,XXX,XXX Claim Y</p> <p>multiple hybrid operating rooms, each of the hybrid operating rooms have radiation proof walls, a floor, and a ceiling;</p>	<p style="text-align: center;">Surgical Center</p> <p>Hybrid Operating Rooms have state-of-the-art diagnostic imaging equipment integrated into the operating room. Miami Surgical Centre (MSC) has multiple state of the art operating rooms which includes imaging systems such as the GE 9800 Flexview C-arm.</p> <p><i>"A hybrid operating room is an OR equipped with a large fixed imaging system that supports high-quality interventional imaging and complex open and minimally invasive surgeries. A revolutionary alternative to conventional operating rooms, the hybrid OR allows physicians to perform procedures using real-time image guidance, and to assess effectiveness and manage perioperative complications, all in a single encounter."</i></p> <p>Source: https://www.ecri.org/Resources/Whitepapers and reports/MS13084 HybridOR Market Analytics Snapshot.pdf</p> <div style="border: 1px dashed gray; padding: 10px;">  <div style="border: 1px solid red; padding: 5px;"> <p>The Miami Surgical Center provides it surgeons with the finest instruments available enabling them to perform the wide variety of procedures:</p> <ul style="list-style-type: none"> • Latest instrumentation for Knee, Hip, Shoulder & Distal Extremity reconstruction and repair • NuBoom Ultra Multi-Modality HD Video • Arthrex Synergy HD3 Arthroscopy • Arthrex Synergy Shaver System • Arthrex Dual-Wave Fluid Management • Arthrex CoolCut RadioFrequency • Orthoscan Mini C-arm • Neurotherm • GE 9800 Flexview C-arm • Carl Zeiss Microscope </div> </div> <p>Source: http://www.surgicalcenter.com/latest-technology</p>

Logic and common sense

➤ Logical thinking is more important than technical knowledge

- 👉 The below screenshot is the best example to get a sense that logical thinking is the key in the infringement analysis.
- 👉 Most of the hospitals don't disclose much of the information on their websites, so in this case the screenshot is captured from the official website of the hospital which shows a door name plate that reads 'operating room #2'. From this it can be concluded that the hospital has at least two operating rooms, thereby fulfilling the criteria of multiple hybrid operating rooms.




Sample Work Product

US X,XXX,XXX Claim Y	Surgical Center
<p>multiple hybrid operating rooms, each of the hybrid operating rooms have radiation proof walls, a floor, and a ceiling;</p>	<p>From the below screenshot it is evident that the Miami Surgical Center has at least 2 hybrid operating rooms.</p> <div>A photograph of a hospital hallway. A purple sign with white text that reads "OPERATING ROOM #2" is mounted on the wall. The sign is highlighted with a red rectangular border. The hallway is brightly lit with recessed ceiling lights and has a light-colored floor. In the background, there are other doors and a person in a blue uniform.</div> <p>Source: http://www.surgicalcenter.com/tour-our-facilities</p>

Cont'd...

- Knowing a building area is near impossible until and unless someone has access to its legal property document or measures it physically. So google map has been used to find the dimensions of the building to calculate the approximate built area.

Legal Advantage	Sample Work Product
<p>US X,XXX,XXX Claim Y</p> <p>The ambulatory surgical center has an area of 20,000 square feet or less.</p>	<p>Surgical Center</p> <p>It is assumed that the surgical center is housed in a building facility which is 20,000 square feet or less. The assumption is based upon certain logical measurements calculated using the information available on website and online mapping measurement tools.</p>  <p>Source: Google Maps</p>

Another example

- In this example we need to find the capacity of the motor (or pump) which was not available in any public domain. But before that we need to prove there is an air pump.
- Capacity of the pump can be calculated in the three ways
 - Information available in the products datasheet or user manual
 - Testing (or reverse engineering) the product to find the ratings of the pump
 - Take a container of known volume and calculate the time pump takes to fill the container. Volume of the container divided by time will give the approximate capacity (or flow rate) of the pump (or motor).



Legal Advantage

Sample Work Product

US X,XXX,XXX Claim Y	Ion Aromatherapy Vaporizer
<p>A device for vaporization and delivery of a volatile source material without combustion of source material comprises a pump means which pushes air through the air flow hole at an air flow rate of between about 0.5 and 5 liter per min.</p>	<p>It is also evident from the screenshots below that 'Ion Aromatherapy Vaporizer' has a motor pump which forces air (vapor) into the balloon bag.</p> <p>Features:</p> <ul style="list-style-type: none">• Fully enclosed ceramic heating element for superior flavor• Vapor bag collection system• Easy-to-use Ion push button valve (patent pending)• 2 interchangeable valves included - Fill multiple bags• Fully digital temperature control system - For precise vaporization• Auto-memory function - Remembers your last temperature• Forced air system - Electronically controlled air flow• Large digital LCD display, with color changing screen• Temperature display in Celsius (°C) or Fahrenheit (°F)• Extra long power cord• 2 year manufacturer limited warranty• Adjustable auto-off timer <p>Source: http://site.halfbakedgoods.net/Images/ion-user-manual-v1.pdf</p>

Cont'd...

- As there was no information available in product data sheet (or user manual) and at the same time the product was not physically accessible so all the three options are not helpful in finding the capacity of the motor.
- And here also logic comes to the rescue. Information related the balloon was available from an online shopping web portal. In the next step the product review videos were searched online.



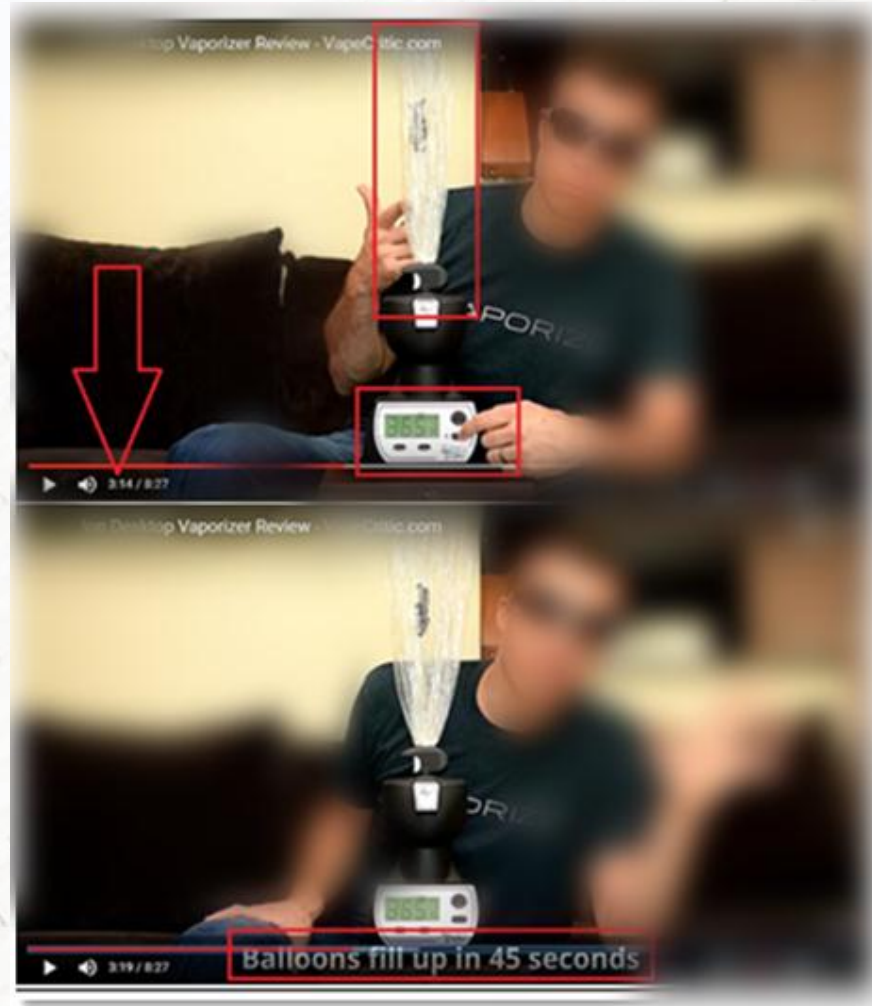
Legal Advantage

Sample Work Product

US X,XXX,XXX Claim Y	Ion Aromatherapy Vaporizer
<p>A device for vaporization and delivery of a volatile source material without combustion of source material comprises a pump means which pushes air through the air flow hole at an air flow rate of between about 0.5 and 5 liter per min.</p>	<p>It is also evident from the screenshots below that the length of the balloon bag is approximately 1foot (12 inches) and it takes 45 seconds for the vaporizer to fill it completely.</p> <p>By looking at the filled balloon bag one can easily judge that the diameter of the balloon is not more than 5 inch. Let's take it to be 4.9 inches (radius = 2.45) and height to be 11.5 inches. Since the balloon bag is cylindrical in shape, its volume can be calculated using $V = \pi r^2 h$. So the total volume of the balloon will be $V = 216.86 \text{ inch}^3$ (taken $r = 2.45 \text{ inch}$ and $h = 11.5 \text{ inch}$) which when converted into litres equals to $V = 3.55 \text{ litre}$.</p> <p>Therefore, from the above calculation it is clear that if the motor takes 45 seconds to fill a bag of capacity 3.56 litres then it will take 63.4 seconds to fill a bag with capacity of 5 litres. This means the motor capacity (flow rate) falls between 0.5 and 5 liter per min.</p> <p>Ion Vaporizer Extra Bags are the set of 4 replacement balloon bags for the Ion Vaporizer. The bags are made of highly durable and heat resistant film material and provides the best taste for your aromatherapy sessions. <u>Ion Vaporizer Extra Bags are approximately 1 ft long and custom designed to fit your needs. The Ion Vaporizer Bags are recommended to be replaced frequently for the consistency of the vapor quality.</u> If you start seeing residue in your bags, it is time to replace them.</p> <p>Source: https://www.vaporseller.com/products/ion-vaporizer-extra-bags</p>


Cont'd...

- From the product review video found online, the time was noted at which the reviewer switched on the pump and the time at which it was switched off. The difference between these two readings would give the time taken to fill the balloon.



Cont'd...

- Using the time calculated and the volume of the balloon, the approximate flow rate of the pump has been computed.

US X,XXX,XXX Claim Y	Ion Aromatherapy Vaporizer
	
	Source: https://www.youtube.com/watch?v=Tml2SSXzz10&feature=youtu.be https://www.vapecritic.com/ion/

- In this example, infringement was proved using the officially available data along with educated guesses and logical assumptions.

One minor error is enough to shift the whole argument

an adapter to convert power from a power source, external to the adapter, to DC power for powering an electronic device, the adapter including circuitry for providing an analog data signal for use by the electronic device to control an amount of power drawn by the electronic device; and

A power source provides electrical energy and it may be alternating current (AC) or the direct current (DC). An adapter converts the given electrical power to DC power for use with electronic devices. The adapter includes an additional circuitry which regulates and controls output power and maintains constant and uniform voltage or power, as it is a mandatory, for the electronic device being charged. The electronic device draws this controlled power from the adapter.

An analog signal provides information about the power output level of the adapter at its outlet sends this signal to the electronic device. In case of the data transfer between two electronic devices the analog signal share the information between the two the electronic devices being connected.

The screen shot below shows the Apple's lightning charger's adapter.



FIG. 1

Source: <http://store.apple.com/vn/product/MD813ZM/A/apple-usb-power-adapter?mode=3c>

The figure below shows the dismantled view of the original Apple's lightning charger's adapter. The picture below shows different electronic circuitry like rectifier to convert AC to DC, regulators and other such circuitries.



FIG. 2

Source: <http://isojied.nl/blog/2013/04/02/apple-5w-usb-power-adapter-230v/>

Jurisdiction

- ✎ Evidences should be according to the jurisdiction
- ✎ In this case it is United States. In the previous slide, it can be noticed that the iPhone adaptor shown as evidence is generally used in Asia and Europe but not in US.
- ✎ Instead, the adaptor shown in the image below should have been used as evidence as this is used in US.



Other form of IPR Infringements

TRADEMARK INFRINGEMENT



DESIGN INFRINGEMENT

Chart 1: Images Depicting Infringement of NIKE Design Patent D498,914 by the Wal-Mart Shoe

D498,914	Wal-Mart Shoe
<p>FIG. 1</p>	
<p>FIG. 2</p>	
<p>FIG. 3</p>	

Reach us

If you would like to contact us for any additional information, feel free to call... or reach us through e-mail at inbox@legaladvantage.net

Cheers,

Amir Ahmed

Legal Advantage LLC

10411 Motor City Drive, Bethesda, MD 20817

Direct: 301-637-6196 Fax: 800-804-4220

Email: aahmed@legaladvantage.net

- Thank you!