



How IP Litigation Will Be Impacted By New Technologies: AI, Smart Devices, and Cryptocurrencies

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Intellectual Property Litigation Impacted By New Technologies

- Patent Litigation
- Trade Secret Litigation
- Copyright Litigation

- Software License Disputes
- Trademark Disputes



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Artificial Intelligence In IP Law - Theory

- Who is liable for the harm created by AI

- Is AI-created IP patentable?
 - People conceive, not companies. *New Idea Farm. Equip. Corp. v. Sperry Corp.*, 916 F.2d 1561, 1566 n.4 (Fed. Cir. 1990).

- If an entity using AI as part of a product or service offering, can it “willfully infringe”? Can it “induce” infringement?



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Artificial Intelligence in Product Liability

Traditional product liability precedent

- *United States v. Athlone Indus., Inc.*, 746 F.2d 977, 979 (3d Cir. 1984) (“robots cannot be sued”); *Jones v. W + M Automation, Inc.*, 818 N.Y.S.2d 396 (NY 2006) (no liability for robotic gantry loading system because defendant complied with regulations)

AI may change the standards if developer/seller creates AI that does harm

- *In re Ashley Madison Customer Data Sec. Breach Litig.*, 148 F. Supp. 3d 1378, 1380 (JPML 2015) (use of a computer program to simulate human interaction could give rise to liability for fraud) (case settled)

No decisions to date regarding liability by manufacturer for AI

- Likely adheres to “reasonable man” standard for human developers



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Artificial Intelligence in IP Litigation

- **No decisions to date regarding IP infringement by an AI or AI-assisted software**
 - 159 cases mentioning “artificial intelligence” on Lexis (35 on “machine learning”), none discussing liability for AI
 - 189 decisions on Docket Navigator mentioning “artificial intelligence”, none discussing liability for AI



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Predictions

- **Patent litigation**
 - Patentability / Inventorship will be harder to prove if AI involved
 - Some patent claims (i.e., method claims) easier to prove on written proof
 - Enhanced infringement will be harder to prove if AI involved (intent/knowledge aspects of patent law, ability to do design arounds)
- **Trade Secret litigation**
 - Independence economic value will be easier to prove if AI involved
 - “not generally known” will be harder to prove if AI involved
 - AI almost explodes the use case for “trade secrets”
- **Copyright litigation**
 - Ownership will be harder to prove if AI involved (Monkey Selfie case, “Next Rembrandt”)
 - Enhanced infringement will be easier to prove if AI involved (no intent requirement)



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Best Practices for Companies - AI

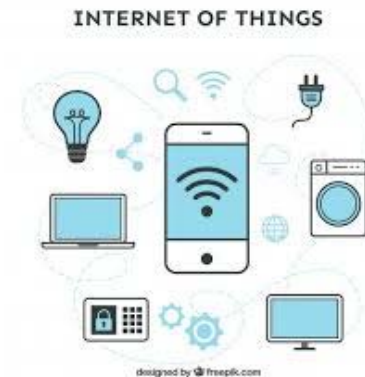
- **If developing any AI products or services, what are the guidelines your company is following for the software? Any ethical constraints?**
 - If developers are aware of potential harm, document that efforts were made to comply with applicable law
 - Beyond R&D, document how the developers made certain programming decisions
 - For example, Microsoft started a project called AETHER
 - Legal function should develop their own written protocols assist engineering in making decisions as to how AI makes decisions
- **Company should be involved in at least one organization that is discussing potential guidelines to satisfy “reasonable person” standards**
 - OpenAI, Partnership on AI, AI Now, IEEE Working Group



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Internet of Things / Smart Devices

- All types of traditional devices, all with lots of patents with each individual device
- Now they are being connected to each other, raising many issues
 - Electronics
 - Sensors
 - Connected networks
- Which stakeholders will be sued – mfr/distributor/retailer?
 - What types of infringement?



Smart Devices in IP Litigation

- Older patents - Can existing patents cover the development of smart devices?
 - Potential new wave of patent litigation for any patent covering Internet-based or “connected” devices, similar to plaintiffs suing for putting “___ on the Internet”
 - Only 16 cases on Lexis mentioning “Internet of Things”
- May be able to also sue more traditional companies whose components are part of smart devices
 - Traditional devices but with added functionality, whole new world of accused devices, ala smartphones
- Newer patents – who is filing new patent applications
 - Lots of mature companies will be fighting over new technologies
 - Lots of startups who are combining traditional technologies around IoT

Predictions

- **Dominant players in IoT space in next 3-5 years will look to enforce patents for connecting devices as space consolidates**
 - Larger players will purchase many IP portfolios both offensively and defensively
 - Would expect to see competitor suits in this space
- **NPEs will seek to assert older patents that may have elements of IoT/connected devices**
 - Will expect many Alice-type arguments that IoT featured are not sufficiently inventive
 - Will expect many enablement arguments as to these types of arguments
 - Will expect defendants to argue that the IoT aspect of the devices are entitled to low royalty amounts



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Best Practices for Companies – Smart Devices

- **Ensure that the company has patent licenses or have conducting a freedom to operate opinion(s)**
- **If the company is doing a joint venture or collaboration, do a deep dive into the portfolio of the partner because the patents may not overlap into this new way of connecting devices**
- **Study the patent landscape. NPEs will be looking to broadly sue over various ways of using the Internet to connect devices, since there will be so many patents issued in the early 2000s that are related to connecting devices across networks, servers, etc. and will be expiring soon**



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Cryptocurrency Issues

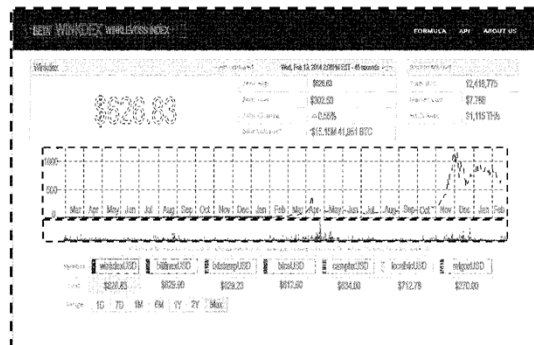
- **Bitcoin, Ethereum and Other Virtual Currencies**
 - Blockchain/distributed ledger technology
 - Simple explanation: transaction -> recording -> cryptographic hash -> on chain
- **“Inventive” way of performing transactions**
 - Only 16 “blockchain” patents issued to date, typically assigned to difficult units at PTO
 - Not a single “blockchain” case yet...
- **Highly disruptive technology across industries**
 - Like with prior technology disruptions, what will be the standard, will there be a protocol like with Bluetooth, wi-fi, currently unknown landscape
 - Almost like the advent of the Internet, new way to communicate information



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Cryptocurrency IP Land Grab

- **Technology for virtual currencies is recent, starting in 2008**
 - Bitcoin – digital currency
 - Ethereum – currency, contracts, platform
 - 1000s of virtual currencies
- **Much of the code was initially open source, less so now (Chain, Digital Asset, IBM and Microsoft)**
 - While “blockchain” is not patentable, many innovations would be patentable
- **Seems like every company getting into this space in some way**
 - Blockchain – 25 (2015) to 341 (2017)
 - Bitcoin – 134 (2014) to 471 (2017)



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Predictions - New “Smartphone War”?

- **Will operating companies become patent plaintiffs?**
 - Banks have filed numerous blockchain patents
 - Is there an incentive to monopolize or dominate the market? By Whom?
 - What products are in the market right now worth suing over?
- **Patent trolls likely to appear shortly**
 - Companies have likely been able to file foundational or fundamental patents over the past few years, entirely new industry
 - Small companies filing unlikely to be aligned with large companies
 - Peer to peer concept not associated with big companies to date
 - Stretching earlier financial patents to cover blockchain?



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Best Practices for Companies - Cryptocurrencies

- **Can this be controlled by/for mature companies?**
 - Blockchain IP Counsel formed in March 2017 to fight NPEs
 - Will blockchain become an industry standard?
 - Companies should join groups to standardize this technology
 - There will eventually be a patent thicket / patent pools
 - Alice motions / CBM reviews?
 - Unclear whether “blockchain” can be patented, could conceivably be 101 challenge
 - CBM reviews are stronger means to challenge financial patents
 - Have non-finance companies filed enough defensive patents?
 - Companies should look to see what technology are likely to be subject to lawsuits



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Questions?



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Thank you!

