Patently Prepared:

Are FOSS Companies Ready to Deal with

Patents in the US & Europe?



Robinson Tryon FOSDEM February 5th, 2017 Brussels

Robinson Tryon

- Over a decade of experience in Free/Open Source Software (FOSS)
- Currently Director of Open Source Strategy for the LOT Network, Inc.
- QA Engineer for The Document Foundation
 - LibreOffice, Document Liberation Project
 - Community outreach & education
- Technical Consultant at Tiltfactor Game Lab, Dartmouth College
 - Metadata Games, crowdsourcing metadata for libraries & archives
- Senior Developer at Interactive Media Lab, Geisel School of Medicine
 - Training programs for doctors and first responders
- Regular speaker at FOSS & Tech conferences in US and Europe
- BA in Computer Science from Dartmouth College
- Based in Dallas, Texas







Goals For This Presentation

- Provide insight on what's happening with patents in the US and in Europe
- Discuss the effects political changes are having on each patent system
- Keep all of you awake
- Patent strategy for businesses



IANAL

- Don't let my wild hair, rapid speech, and glasses fool you: I'm not a professor, either
- None of us wants a dry lecture loaded with lugubrious legal principles
- But I do hope you have some familiarity with the ideas of law and patents, because we're going to jump right in!



Let's Begin...



Patently Complicated

- Before I began researching US and European patent systems, I didn't fully understand the total impact of events such as the Brexit and the election of Donald Trump
- What began as a narrow review of differences evolved into an much wider analysis of courts and trade



Make a Plan

- Failure to have a strategy for dealing with patents is a far too common mistake
- Some patent strategies are smarter than others, but many companies don't have any plan in place
- Not being aware of the patent landscape in your country as well as any countries in which you do business is *ridiculous*



Educate Yourself

- You may not be legally responsible if someone runs into patent problems by using your work or bringing your products into another country, but...
- It doesn't hurt for you to educate yourself on legal systems beyond your own



Slings & Arrows



A Pastor, Arrows, and Germans

- Jordan Gwyther was a youth pastor at a Seattle Church who liked to shoot people with arrows
 - Foam-tipped arrows, that is
- An avid LARPer, he began selling LARP battle equipment online
- He expanded his business and began to import and sell arrows made by German company iDV





Hark! A rustle in the grass

- In October 2015, Indiana-based Global Archery sued Gwyther for both patent and trademark infringement
 - They claimed that the arrows he sold infringed on the patents covering their soft-tipped Archery Tag game
- Global told Gwyther that they had a war chest of \$150,000 with which they would fund this lawsuit
- With little gold in his treasury, Gwyther turned to GoFundMe, asking the LARP community to help him generate similar legal funding





What good is a phone call if you're unable to speak?

- In February of 2016, in response to the GoFundMe campaign, Global upped the stakes and tried to get a gag order to stop Gwyther from talking about the case
 - They were unsuccessful
- After news coverage of the suit, NewEgg stepped forward to help Gwyther, donating \$10,000 from sales of "(Patent) Troll Hunters" t-shirts



NewEgg, Destroyer of Trolls

- NewEgg and its chief counsel Lee Cheng are no strangers to jousting with (and slaying) patent trolls
- Although Global Archery does sell products, Cheng labeled them a troll, saying

"Global is asserting questionable IP rights aggressively and counting on the high cost of defensive litigation to win...Newegg hates trolls—they bully the weak, they hurt consumers, they hurt America, and they just suck."



They All Lived Happily Ever After

- After Cheng and NewEgg joined the defense, Global finally acknowledged prior art from Germany provided by Gwyther
- Global promptly dropped its case



Gwyther was lucky

- Not everyone has a champion to rescue them from lopsided litigation
- Gwyther knew little about patents and the law, and even though he had strong prior art, was unable to shake Global's lawsuit on his own
- Companies especially small companies must not overestimate their abilities against a wealthy plaintiff



Understand the Playing Field

- Keeping defendants like Gwyther in our minds, let's take a critical look at the EU & US patent systems
- To be prepared, we need to look to the future
 - What will our courts look like?
 - What relationships will exist between countries?



UPC



- The Unified Patent Court (UPC) is a proposed court open to all members of the EU
- This court would cover all cases of infringement involving patents of the participating countries as well as Unitary Patents
 - Unitary Patents are a related proposal for a pan-European patent



- For detailed information about the UPC, please see Benjamin Henrion's great talk from FOSDEM last year
- To catch you up to speed, here's a summary of his talk detailing some of the biggest concerns about the UPC:



UPC: Concerns

- A pro-patent court
 - (US Court of Appeals for the Federal Circuit?)
- 2/3 of the judges ("Technical Judges") have patent litigation experience, but no law degree
 - Mostly those who've worked in the field they're now regulating
- No appeals court (like the SCOTUS) to regulate/oversee the UPC's activity
- Large German influence with pro-software-patent tradition
- Independent from the EU
- Patents only translated into FR/NL/DE + EN
 - Auto-translations into other languages not legally binding



UPC: Why doesn't it exist yet?

- Court is proposed
 - But not enough countries have ratified the proposal
- Both UK and Germany have yet to sign
- Brexit put a monkey-wrench in the works



Brexit

 What effects will the Brexit have on patents and patent litigation?

> Cheerio, European Union!





Brexit

- Short term: No major changes in patents in Europe
- Long term: Likely large impact on reform of patent laws
- After UK leaves the EU, it will no longer be under the jurisdiction of EU courts and won't qualify to be a member of the proposed UPC



Brexit: We're leaving, but first we're going to ratify!

- Confused yet? Just you wait!
- In November, the UK "confirmed it [was] proceeding with preparations to ratify the Unified Patent Court Agreement"
- But if they're leaving, why would it matter?
 - The UK explained: "as long as we are members of the EU, the UK will continue to play a full and active role"
- They also included the caveat

"But the decision to proceed with ratification should not be seen as pre-empting the UK's objectives or position in the forthcoming negotiations with the EU."

Can the UK join the UPC and leave the EU?

- UPC was to be composed solely of EU members
- If UK joins and then brexits, what happens to UPC jurisdiction?
- Some scholars have suggested a (convoluted) mechanism for the UK to accomplish both
 - Of course, many in the UK see ineligibility to join the UPC as a feature, not a bug



UK without the EU or UPC?

- Without EU or UPC, the UK would rely solely on national patent policy
- UK Patent Office does not allow programs as such to be patented
 - But does allow computer-implemented inventions
- The UKPO applies exclusions to patentability more broadly than the EPO
- Left on its own, the UK's patent system would likely create a more FOSS-friendly jurisdiction



The USA

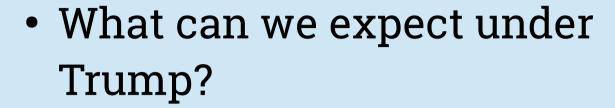


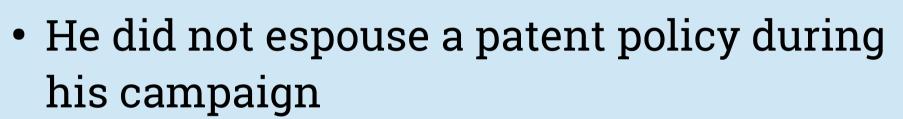
Patents in the USA

- What's going on with patents in the USA?
- Under Obama, the America Invents Act was passed
 - The Linux Defenders project used new provisions in the Act to file prior art with the Patent Office and void bad patents before they were issued
 - Increased role for defensive publications in the patent process



Patents in the **W**A





- IP not a primary focus for him
- Everyone is enjoying speculating, but not much known



Patents in the USA Donald

- What DO we know?
 - Uncle was a famous inventor in radiation therapy
 - Has criticized companies in high tech including Apple & Amazon
- Because of his uncle and his background in business, it's possible we'll see a policy emerge that embraces more patents and more litigation
 - And he'll probably definitely tweet about it



Who's In Charge Of This Thing?



US Patent Office: Michelle Lee

- Director of the US Patent Office
- Appointed under Obama administration
- Attended Stanford Law at same time as Trump techadviser Peter Thiel
- According to Rep. Darrell Issa, she'll stay on under Trump
 - "We just have to get Michelle to stay on long enough to finish what she started"



Michelle Lee: Friend or Foe?

- Previously at Google
- Fought for patent reform under Obama
- Enhanced Patent Quality Initiative
 - Acknowledged USPTO had previously issued many poor-quality patents
- Implemented inter partes review (IPR)
 - Helped to deal with trolls
 - Goal of being faster, cheaper, & more accurate than hearings
- · Possibility of putting an end to forum-shopping



Will she continue as Director?

- Several USPTO political appointees resigned before inauguration, but Lee remained
- No word from Trump or staff about replacement
- Lots of unsubstantiated rumors
 - The new normal?
- The Commerce.gov website (as of Saturday) lists her position as vacant, but the USPTO website disagrees
- Just another day under the current administration!



Who Might Replace Michelle Lee?

- If a new head of the PTO is appointed, who would it be?
- Philip Johnson (of Johnson & Johnson)
 - Previously vetted by Obama for the position
 - Denounced by tech companies



Who's Afraid of Philip Johnson?

- Opponent of patent reform
- Criticized legislation that would require patent trolls to describe patent infringement in detail
- Opposed transparency requirements regarding the true owners of patents leveraged by trolls
- Were he appointed, patent trolls would be quite happy



The Cost of a Patent Troll Suit



Cost of Patent Lawsuit

Sued by a Patent Troll over software patents?

```
≈ $3.3 million
```

This includes

```
$1.5 million – Legal Fees
```

```
$1.8 million – "Licensing Costs" (if you have to settle)
```

• Small companies bear a disproportionate amount of these costs (37%)



Cost of *Hardware* Patent Lawsuit

- Do any of you work in hardware?
 - Hopefully not...
- If you're sued by a troll over hardware, your average costs will be even higher
 - Legal fees: \$1.3 million
 - License cost: \$8.1 million
 - Grand Total of: \$9.5 million



Speaking of Hardware...



Qualcomm: FTC files suit

- The FTC sued Qualcomm on Jan 17th, accusing them of unfair competition in patent licensing. Claims include:
 - Violating commitment to FRAND licensing
 - Won't sell processors unless bundled with a patent license
 - Exclusive deals with Apple that harm competition



The Federal Trade Commission

- Patents are issued by the USPTO and can be regulated in trade by the FTC
- The FTC has published multiple reports on PAEs (aka "Patent Trolls")
- FTC can bring suit against patent holders for anti-competitive behavior



Qualcomm: We love open source!

When Qualcomm announced a new open source subsidiary back in 2009, Cnet proudly proclaimed:

"Qualcomm gets into open source, pigs begin to fly"



Qualcomm: FTC under Trump?

- After Trump's inauguration on Jan 20th, groups including Americans for Tax Reform and the American Conservative Union have asked the President to halt the FTC's action
- The FTC holds a tremendous amount of power in regulating business
- How the administration handles this suit could tell us much about the next 4 years



Qualcomm: FTC under Trump?

- The FTC filed suit based on a 2-1 vote
- FTC Chair Edith Ramirez (D), who voted *Yea*, will resign in February
- Comm. Terrell McSweeny (D), voted Yea
- Comm. Maureen Ohlhausen (R), voted *Nay*



Qualcomm: FTC under Trump?

- Ohlhausen, the lone dissenter, has recently been appointed interim chair of the FTC by Trump
- With Ramirez gone, companies such as Qualcomm are much more likely to increase patent litigation and adopt strict patent licensing policies



Qualcomm: Ohlhausen & the FTC?

- Ohlhausen is critical of net neutrality and government regulation in general
- On Jan 24th, Ohlhausen described Obama's FTC as one that "pursued an antitrust agenda that disregarded sound economics", "imposed unnecessary costs on businesses", and made unsupported "assertions of 'unfair competition'"
- Under Ohlhausen, the FTC is expected to give Qualcomm more flexibility in how it capitalizes on its assets



Ohlhausen & Patents?

- FTC Chair Ohlhausen also discussed PAEs aka
 "Patent Trolls" in her Jan 24th talk
- In recent years "PAEs became the boogeyman of the patent world...I worried that [proposed patent reform] would have harmed US innovation"
- Unclear what actions she will take re: PAEs, but highly unlikely for FOSS companies to see meaningful patent reform



Reducing Risk



Reducing Risk

- No matter who you are and what patent and financial assets you hold, your company could be seriously challenged by a patent suit
- No patent strategy is bulletproof
- Many approaches to reducing risk



Reduce Patentable Activity

- Patent Trolls don't produce goods, sell services, or participate in collaborative behaviors
 - By not doing anything, Trolls reduce the ability of others to sue for patent infringement
- Most companies need to produce to stay in business, but avoiding certain activities (or not publicizing said activities) can reduce your risk



Open Invention Network (OIN)

- Defensive patent pool
- Community of patent non-aggression regarding the "Linux System"
- 2,000+ members
- Co-founded the Linux Defenders program



LOT Network

- Where I work!
- Non-profit, collaborative solution to the Patent Troll problem
- Diverse community of start-ups, companies, and non-profits committed to protecting themselves long-term against Troll litigation
- Immunizes companies against over 632,000 patent assets



Open Patent Office

- A new strategy, proposing an alternative to the traditional patent office
- I don't know much about this one, but Frederik Questier will be giving a talk about this soon-to-launch entity right after this talk, so Stick Around!



More Strategies

- I've listed the strategies with which I'm most familiar, but there are many more
- The EFF created a helpful document

Hacking the Patent System: A Guide to Alternative Patent Licensing for Innovators

- Authored in 2014, but has some good insights



Let's look at one more patent suit

- Patent lawsuits are expensive in all fields
- To pick an example with broader recognition than software patents, consider CRISPR: a prokaryotic DNA technique from the biotech world
- There is significant dispute over which researchers should have control of the patents vital to implementing CRISPR



CRISPR: Nobody wants to share

- Harvard University & The Broad Institute are duking it out with Berkeley University in a classic Eastside vs. Westside feud
- Harvard et al. spent nearly \$11 million in 2016 and over \$4.5 million in 2015
- Berkeley's bill is over \$5 million
- And the suit isn't close to being resolved



CRISPR: Universities Above Average

Average cost for a lawsuit like this?

≈ \$7 million

• This particular case is becoming *quite a bit* more expensive



CRISPR: Why should we care?

- You might think "Why should Free Software companies care about biotech patents?"
- CRISPR is a tool for selectively editing and rewriting DNA
- One of the first modern programming tools for the genetic codes of mice and men



CRISPR: Why should we care?

- Biotech manipulation is in its infancy
- Many of the same issues we discuss re: computer code are relevant to genetic code
- We're already starting to see computer integration with living bodies, but the future won't be on a macro scale like pacemakers and insulin pumps



Micro Machines

- The future is microscopic inside our cells themselves
- Is the FOSS community prepared to help safeguard this future?
 - No, not yet!



Genetic Freedom

- We need to become prepared soon so the patent system doesn't leave us in the dust
- Otherwise we won't be able to practice and promote genetic freedom alongside software and hardware freedom



The Reality

- There's no one-size-fits-all strategy to deal with patents
- FOSS companies need to prepare for their individual patent battles, as well as
 - Staying abreast of larger patent-related topics that have ethical and economic ramifications for all of us



The Reality

- Most FOSS companies don't have large legal departments or budget
- Educating yourself and your company, and continuing to learn about the pertinent systems, people, and technologies is the best only strategy that will bring you longterm success



Questions?

Robinson Tryon

Robinson@lotnet.com IRC: colonelqubit



This presentation is available under a CC-BY-SA 4.0 license.

Please see the References & Sources slides for notes.



Images & Video

- Bar code public domain mazeo https://openclipart.org/detail/244962/bar-code
- English lawyer *public domain* liftarn https://openclipart.org/detail/1041/english-lawyer-early-20th-century
- Brass Scales of Justice public domain GDJ https://openclipart.org/detail/244044/brass-scales-of-justice
- Wedding suit public domain wakro https://openclipart.org/detail/75841/wedding-suit
- Archer public domain tzunghaor https://openclipart.org/detail/170892/archer
- Odd Knight public domain j4p4n https://openclipart.org/detail/169702/odd-knight
- Dwarven chainmail public domain Flying Dutchman https://openclipart.org/detail/241863/dwarven-chainmail
- Treasure chest public domain Moini https://openclipart.org/detail/188617/treasure-chest
- Donald Trump cartoon 3 public domain GDJ https://openclipart.org/detail/256534/donald-trump-cartoon-3



Links & References

- How Linux Defenders attack bad software patents
- https://arstechnica.com/tech-policy/2013/09/how-linux-defenders-attack-software-patents-before-thevre-approved/
- How Patent Policy Made Qualcomm an Antitrust Target
 http://www.therecorder.com/home/id=1202777871269/How-Patent-Policy-Made-Qualcomm-an-Antitrust-Target
- Feds sue Qualcomm for anti-competitive patent licensing https://arstechnica.com/tech-policy/2017/01/feds-sue-qualcomm-for-anti-competitive-patent-licensing/
- Trump told to stop gov't lawsuit over Qualcomm patent licensing https://arstechnica.com/tech-policy/2017/01/conservatives-to-trump-dump-the-ftcs-patent-case-a gainst-qualcomm/
- U.S. Antitrust Agency Sues Qualcomm Over Patent Licensing http://fortune.com/2017/01/17/qualcomm-antitrust-case/
- Antitrust Policy for a New Administration
 https://www.ftc.gov/system/files/documents/public_statements/1051993/antitrust_policy_for_a_ne
 w_administration.pdf
- Trump names Maureen Ohlhausen as acting FTC chairwoman https://www.washingtonpost.com/news/the-switch/wp/2017/01/25/trump-names-maureen-ohlhausen-as-acting-ftc-chairwoman/
- CRISPR https://en.wikipedia.org/wiki/CRISPR
- CRISPR patent fight: The legal bills are soaring https://www.statnews.com/2016/08/16/crispr-patent-fight-legal-bills-soaring/
- Who Owns the Biggest Biotech Discovery of the Century? https://www.technologyreview.com/s/532796/who-owns-the-biggest-biotech-discovery-of-the-century/
- Staunch opponent of reform tapped to head US Patent Office https://arstechnica.com/tech-policy/2014/06/staunch-opponent-of-reform-tapped-to-head-us-patent-office/
- Trump Silent on Patent Law, but PTO Leadership Change Coming https://www.bna.com/trump-silent-patent-n57982082594/
- Why It's a Good Thing If Michelle Lee Stays at USPTO http://www.patentprogress.org/2017/01/24/good-thing-michelle-lee-stays-uspto/
- Leadership https://www.commerce.gov/directory/leadership

- Is Michelle Lee Refusing to Leave the USPTO? http://www.ipwatchdog.com/2017/01/18/michelle-lee-refusing-leave-uspto/id=77287/
- Michelle Lee Will Remain Head of USPTO under President Trump https://nlipw.com/michelle-lee-will-remain-head-uspto-president-trump/
- Patent office director 'open' to staying http://www.politico.com/tipsheets/morning-tech/2016/11/patent-office-director-open-to-staying-2176/11/patent-office-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-to-staying-director-open-
- Lee staying on as patent chief under Trump administration http://www.politico.com/blogs/donald-trump-administration/2017/01/michelle-lee-patent-office-chief
- The Direct Costs from NPE Disputes http://scholarship.law.cornell.edu/cqi/viewcontent.cqi?article=4620&context=clr
- EFF: HACKING THE PATENT SYSTEM A GUIDE TO ALTERNATIVE PATENT LICENSING FOR INNOVAT https://www.eff.org/files/2016/01/26/hacking_the_patent_system_belcher_and_casey_updated_janu
- John G. Trump https://en.wikipedia.org/wiki/John_G._Trump
- Patents Under The Trump Administration https://www.law360.com/ip/articles/885572/patents-under-the-trump-administration
- Qualcomm gets into open source, pigs begin to fly https://www.cnet.com/news/qualcomm-gets-into-open-source-pigs-begin-to-fly/
- Brexit: Impact on patents
 https://www.dlapiper.com/en/us/insights/publications/2016/04/brexit-at-a-glance/brexit-patents/
- The Patent Troll Abides: 2016 in Review https://www.eff.org/deeplinks/2016/12/2016-review-patent-troll-abides
- Trump Advisor Pens Almost Totally Clueless Piece About 'Intellectual Property Theft' https://www.techdirt.com/articles/20170131/23523236603/trump-advisor-pens-almost-totally-clueles-property-theft.shtml
- Trademark lawsuit over LARP archery gets thrown out of court https://arstechnica.com/tech-policy/2016/06/trademark-lawsuit-over-larp-archery-gets-thrown-out-
- UK Patent Infringement: A fast UK decision could assist in Germany http://www.forresters.co.uk/media/179598/uk_patent_infringement_proceedings_jvg_mtb__10_11_11
- Sad to CJEU Go? What Brexit Could Mean for Intellectual Property
 http://trustinip.com/sad-to-cjeu-go-what-brexit-could-mean-for-intellectual-property-part-1-of-2/
- A possible way for a non-EU UK to participate in the Unitary Patent and Unified Patent Court? http://ipkitten.blogspot.be/2016/06/a-possible-way-for-non-eu-uk-to.html
- UK intends to ratify Unified Patent Court Agreement http://kluwerpatentblog.com/2016/11/28/uk-will-ratify-%C2%ADunified-patent-court-agreement/
- UK signals green light to Unified Patent Court Agreement https://www.gov.uk/government/news/uk-signals-green-light-to-unified-patent-court-agreement

