### Concrete Analysis of Abstract Idea: Alice/Mayo Step One

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#### The Problem With "Abstract Idea"

- Undefined except by example in software cases
- At some level, almost any software-based claim can be said to be directed to an abstract idea
- Even something physical like controlling a robot's movement

### Alice/Mayo Step One - Enfish

- "We must first determine whether the claims at issue are directed to a patent-ineligible concept."
  - Alice, 134 S. Ct. at 2355 (quoted in Enfish, 822 F.3d at 1335)
- "That formulation plainly contemplates that the first step of the inquiry is a meaningful one, i.e., that a substantial class of claims are not directed to a patent-ineligible concept."
  - Enfish, 822 F.3d at 1335



### Alice/Mayo Step One - Enfish

- "The 'directed to' inquiry, therefore, cannot simply ask whether the claims involve a patent-ineligible concept..."
- "...because essentially every routinely patenteligible claim involving physical products and actions involves a law of nature and/or natural phenomenon —..."
- "...after all, they take place in the physical world."
  - Enfish, 822 F.3d at 1335



# Software Does What Hardware Did

- Software is supposed to run on generic hardware (processor = a bunch of circuits and circuit elements)
- Software is supposed to reduce or eliminate the need for special-purpose hardware
- Software is supposed to accomplish what circuits and circuit elements accomplished

### Back to Alice/Mayo Step One

- "Software can make non-abstract improvements to computer technology just as hardware improvements can,..."
- "...and sometimes the improvements can be accomplished through either route."
- "Therefore, we find it relevant to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea, even at the first step of the Alice analysis."
  - Enfish, 822 F.3d at 1335



# Software Does What Hardware Did

- A circuit arrangement clearly is patenteligible
- Patentability (novelty and unobviousness) analysis proceeds immediately in circuits cases
- The circuit arrangement is patentable provided it is claimed sufficiently clearly



### Back to Alice/Mayo Step One

- "For that reason, the first step in the Alice inquiry in this case asks whether the focus of the claims is on the specific asserted improvement in computer capabilities ..."
- "... or, instead, on a process that qualifies as an "abstract idea" for which computers are invoked merely as a tool."
  - Enfish, 822 F.3d at 1335-1336

### Software Runs on Generic Hardware

- That's really the point of having software
- Maybe software just needs to be disclosed and claimed at the same level of specificity that hardware does
- That's how the software can be shown to be more than "merely a tool"
- That's how the software can be shown to improve computer capabilities

#### But Does That Go Far Enough?

- What does it really mean to "improve computer capabilities"?
- Does the computer have to run better?
- Or is it enough that the programmed computer does its intended job better?
- If my robotic control is improved with better programming, shouldn't I be allowed to apply for a patent?
- Or do I have to be able to show that the software improves the functioning of the computer?

### Thank you!

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