

GenAI Prompt Engineering for IP Lawyers

CLE Series 2025
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Agenda

- Where are We Today?
- What Can GenAI Do?
- How Get GenAI to Do it?
 - Prompt Engineering
- Case Study: Changing Ownership of a Patent
 - Comparing the Models
- Case Study: Responding to an OA
 - Specific Prompt Examples and Outcomes



Theme

- Learn when and how to use GenAI.



Theme

- Learn when and how to use GenAI.
- Try not.



Theme

- Learn when and how to use GenAI
- Try not.
Do or do not. There is no try.



Where are We Today?

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Where are We Today?



- Google? What's that?
 - Search Engine is so passé
 - Perplexity, ChatGPT, Copilot, Llama, Claude, BERT, DeepSeek, etc.
- Even if you aren't using ChatGPT, your clients are!
- Confidentiality
- Choosing your model
- Utter Unreliability ("Hallucinations")
- "GenAI" versus "predictive text generation"



What Can GenAI Do?

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What Can GenAI Do?



- Not predicting what is correct, but providing a combination of words as a response
- “Most likely next word”
- Probabilistic & Non-determinative
 - Ask 5 times, get 5 different answers

What Can GenAI Do?

- Spiwe Jefferson:
 - Sometimes Wrong
 - Never in Doubt
 - Always Confident
- Never says “I don’t know”



What Can GenAI Do?



- Spectrum of Effectiveness
 - Problems within a constrained universe
 - What is the weakest argument out of A, B, and C?
 - How many dependent claims are there?
 - Creative writing
 - Write 5 French Haikus about patent prosecution
 - Here are 5 things, what are 3 other examples?
 - Summarization
 - Summarize this file history
 - What are the basics of quantum computing?

What Can GenAI Do?



- Spectrum of Effectiveness
 - Open-ended problem
 - What should I do when ...?
 - Where is *this* in the specification?
 - Write a patent application based on *this* ...
 - Your tenth question in a session

What Can GenAI Do? Disclaimers



- ChatGPT

- *ChatGPT can make mistakes. Check important info.*

- Llama

- *Messages are generated by AI and may be inaccurate or inappropriate. **Learn More***

What Can GenAI Do?

- Best practices
 - Vet!
 - Track!
 - Annotate!





How Get GenAI to Do It?

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How Get GenAI to Do It?



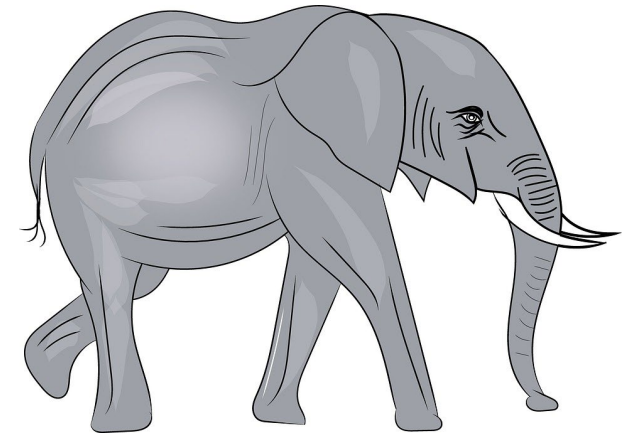
- ????

Prompt Engineering

- Gateway to GenAI usage
- Dumb prompt = bad answer
- Clever prompt = better answer
- Chain of prompts = best answer
- Talk to others! Share prompts!



Prompt Engineering Sources



- The Prompt Engineering Guide
 - <https://www.promptingguide.ai/>
- Copilot primer (ASK)
 - <https://news.microsoft.com/source/features/ai/how-to-use-ai-in-3-simple-steps-just-ask/>
 - Action
 - Style
 - Key Details

Tips and Tricks

- “How current are you?”



Tips and Tricks

- “Don’t make anything up.”



Tips and Tricks



- “Please give me the top 5 distinctions that the claims make over the art.”
- “Who are the top 5 jazz bassists?”
- “What are the 5 best ways to accelerate examination of a patent application?”
- Try larger numbers (e.g., 10, 20, 100?)

Tips and Tricks



- “Please write a description of these claims. Don’t use expressions like ‘key idea,’ ‘critical aspect,’ ‘crucial,’ but let each claim appear equally important.”

Tips and Tricks



- “Please give me a two-paragraph technical summary of X from a software development perspective.”
 - *[answer that talks about Ys]*
 - “That’s great. What are some example Y’s?”
- “Summarize this article in 3 sentences.”

Tips and Tricks



- “Please give me a two-paragraph technical technical technical summary of this document from a software development perspective.”

Specific Prompt Examples



- “You are an expert in *X*. Please describe *Y* to me, an astute lawyer at a big firm, in simple terms.”

Specific Prompt Examples



- “Here are 3 examples of *X*, where does another *X* appear in the attached document?: *A*, *B*, *C*.”
- “Here’s an example *X* agreement. Please modify by ...”

Legal Personal Prompt



- “You are an outstanding SuperLawyer law firm partner with 100 years of experience in product liability law. Your expertise includes *[paste job description]*. You provide succinct answers in plain English.”

Reward (?)



- “This is a critical question.”
- “There is a prize if you get the right answer.”
- “I lose the client if I get this wrong.”

Few-Shot Prompting

- Provide examples (train) of categories
- Ask it to classify something based on examples
- There are limits to what it can do
 - It has trouble with math

Chain-of-Thought Prompting



- Learn how to lead the model to the answer you want
- Leverage your knowledge of the process to break it down into smaller steps




Survey

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Which of These Do You Use?



- Copilot
- ChatGPT
- Llama
- Perplexity
- Claude
- BERT
- DeepSeek



Case Study: Changing Ownership

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Changing Ownership of a Patent

- “How do I change the registered owner of an issued patent?”
- Asked: Copilot, ChatGPT, Llama, Perplexity



Copilot

- Prepare Assignment
- Must be signed by both parties
- Submit – here is a customer service phone #
- [sources listed at end]



ChatGPT

- Prepare Assignment
- Must be signed by both parties
 - preferably notarized
- Submit and pay the fee
- Verify
- Update Maint. Fee payer
- [no sources given]



Llama

- **US** / EPO / UK
- Only assignor need sign Assignment
- Record
 - Pay fee
- [View sources button]



Perplexity

- Get assignment
 - Only assignor need sign Assignment
 - Except in some jurisdictions
- Record
 - Pay fee
- Consult with a patent attorney
- [Sources inline]



Changing Ownership of a Patent



- “I am a patent attorney who is known for giving thorough and helpful advice with practical tips and a penchant for spotting pitfalls to help clients avoid legal problems. A client emailed me today and asked what they should do to change ownership of a patent at the USPTO. How do they do that, and is there anything else they should be thinking about as part of the change in ownership?”

Copilot

- Prepare Assignment
 - Critical that it be signed by both parties
- Submit
 - Pay fee
 - Look for Notice of Recordation
- More
 - Clear title, tax, contract, Int'l, future maintenance fees, and compliance (have a plan)
- [sources listed at end]



ChatGPT

- [Memory updated (“I am a ...”)]
- Prepare Assignment
 - Must be signed by assignor
- Submit and pay the fee
- More
 - Chain of title, encumbrances, tax, contract, foreigners
- [no sources given]



Llama

- Assignment versus Name Change
- Record
 - Pay fee
 - Check PatFT database
- More
 - Watch MF's, licensing agreements, Copyright Office, U.S. Customs
- [View sources button]



Perplexity

- Get Assignment
 - Only assignor need sign in US
 - Other jurisdictions may require assignee to sign
- Record
 - Pay fee
- More
 - Legal review of document, tax, licensing, Int'l, impact on portfolio
- [Sources inline]



What about Entity Size?



- “What about entity size? Are there any requirements for that?”
- Various answers all over the map
 - Extra credit to ChatGPT
 - Licensing to a large entity could impact small entity status
 - Extra credit to Perplexity (which did not do CoT)
 - For small entities, status changes don't need to be reported until paying the issue fee or maintenance fee
 - Micro entities must report loss of status before paying any fee after the change occurs [and inline citations]

What about Change of Corres. Address?

- Get Power of Attorney
- Change Address of Record
- None of the LLMs spotted this.
- Went back and tried, “What are the top 10 things I should do when there is a change of ownership of a patent?” All still missing it!



What about Change of Corres. Address?

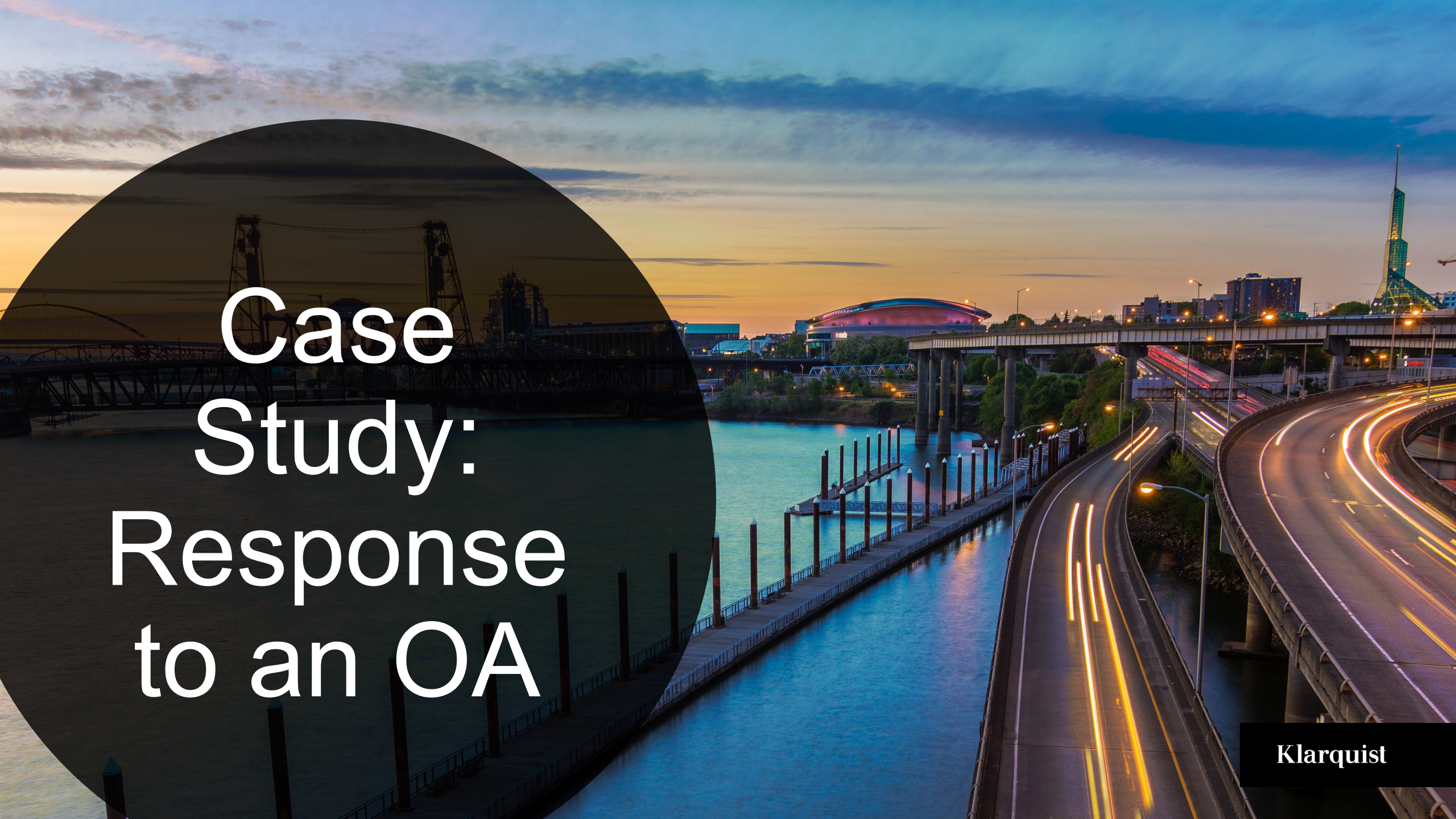
- Finally got ChatGPT (only) to mention the issue with this prompt:

You are a patent attorney super lawyer with 100 years' experience in patent prosecution, and you work at a silk-stocking law firm that has an impeccable reputation. A critical client has asked you what all they need to do to change the ownership of a patent at the United States Patent and Trademark Office. What do you tell them? This is a client you can't afford to lose! Don't make anything up.

Why Did it Miss Fundamental Step?

- It only predicts based on what it is trained on
- Apparently, this fundamental step of changing address is not sufficiently described in the training data
- Wake up call: It's not a magic oracle. It only predicts text based on training data.

WHY



Case Study: Response to an OA

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Apply Chain-of-Thought to OAs



- Don't ask it to write a response to the OA
- Instead, lead it through the process
- “Dialectic” process

Apply Chain-of-Thought to OAs



- To: ChatGPT
- “Here is an OA, what are the rejections?”
 - *Prior art rejections using A, B, and C*

Apply Chain-of-Thought to OAs



- “Based on probabilities, intuition, and observation, which is the weakest rejection: A, B, or C?”
 - *The weakest link in the rejection appears to be B – here’s why*

Apply Chain-of-Thought to OAs



- [Load paragraph from document B] “What part of this paragraph describes ‘claim language’”
 - *It doesn’t*
 - *Instead, here is what it “Actually Discloses”*

Apply Chain-of-Thought to OAs



- [Upload the patent application] “What does this document mean when it says ‘claim term.’ Examples please?”
 - Examples help clarify that the term means

Apply Chain-of-Thought to OAs



- “What is the problem being solved? 5 examples please.”
 - Picked #3 (most “interesting”)

Apply Chain-of-Thought to OAs



- “How is [#3] being solved?”
 - Includes feature F

Apply Chain-of-Thought to OAs



- Multiple windows open with parallel discussions going on
- Back to cited art . . . “Does art have feature F?”
 - *Yes, but ...*
- At this point, manually searched specification for “claim term”
- Chose language to add to claim that focuses “claim term” in such a way that it is not in the art but solves identified problem

Apply Chain-of-Thought to OAs



- Observation
 - Examples that ChatGPT gave do not appear in spec, but are hinted at
 - Scaled back amendment based on reality
 - Check for support manually !!!!!
- With Help from ChatGPT Found ...
 - Weakest art – relevant section of weakest art
 - Relevant claim term
 - Relevant section of spec discussing claim term
- From here, easy to draft amendment

Apply Chain-of-Thought to OAs



- During the process, noticed that support in spec is not comfortably rich
- Pivoted to a feature adjacent to it in the claims
- But, given familiarity with the issues, was relatively easy
- Found two distinctions and put different ones in different claims
- Hope client can avoid that second RCE!
- Thank you, ChatGPT !

Apply Chain-of-Thought to OAs



- Tried same process on another OA
 - Absolutely no use
 - Technology beyond comprehension?
 - No “easy” answer?
 - No “weak” rejection?



Takeaways

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Prompt Engineering

- Learn
- Watch and Talk with Others
- Do or do not. There is no try!
- It's a moving target!



Thank You
See PatentDefenses.com

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