ABSTRACT

Athelia receives an Office Action rejecting her patent application under § 103 (obviousness). With Alexander's guidance, she must overcome the rejection using secondary considerations - objective evidence of non-obviousness including commercial success, long-felt need, and unexpected results. This chapter provides deep instruction on the Graham factors (scope of prior art, differences from claimed invention, level of ordinary skill, secondary considerations), the nexus requirement linking evidence to claimed features, and post-KSR standards for combining prior art references. The narrative demonstrates how secondary considerations can tip the balance and overcome prima facie obviousness when primary references seem damaging.

CHAPTER EIGHT - THE DOWNLOAD ACCELERATES

Old Law: Jurisprudence of Myth (Patent Law Edition)

MONDAY NIGHT - 65 HOURS REMAINING

They spread the photographs across Athelia's desk. Hundreds of images. The Original Queen's patent. The 47 failed candidates. Archive signatures. Evidence.

Casey had gone to bed an hour ago. Alexander sat on the floor, organizing documents into piles. Athelia stared at her laptop, cursor blinking on a blank page titled: RESPONSE TO OFFICE ACTION

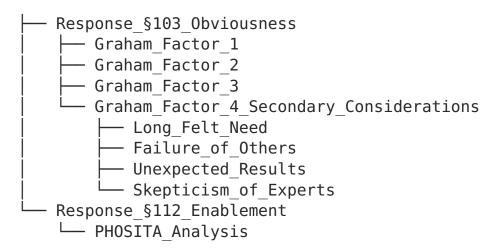
"I don't know where to start," she whispered.

Alexander's ears swiveled toward her. "Start with § 102. That's the easiest. We have proof the Original Queen's patent excludes the bond element. Her Claim 3 explicitly says 'no attorney or bonded partner.' Your invention requires both."

"But how do I WRITE that? What format?"

Her hand moved before she could think. A syntax tree flowed across the screen:

RESPONSE_TO_OFFICE_ACTION			
— AMENDMENTS			
├── Claim_Amendments			
└── Specification_Amendments			
└── REMARKS			
<pre>Acknowledgment</pre>			
<pre>Response_§101_Utility</pre>			
Response_§102_Anticipation			
│			



She read the tree structure automatically: "Response format. Hierarchical. Nested arguments."

And then her hands typed beneath, translating the tree into outline form:

OFFICE ACTION RESPONSE STRUCTURE:

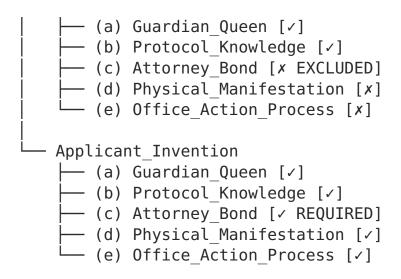
- I. AMENDMENTS (if any)
- II. REMARKS
 - A. Acknowledgment of Office Action
 - B. Response to § 101 Rejection
 - C. Response to § 102 Rejection
 - D. Response to § 103 Rejection
 - E. Response to § 112 Rejection
- III. CONCLUSION
- IV. EXHIBITS

"I didn't know that," Athelia breathed. "I didn't study prosecution procedure. But I just... wrote it."

Alexander leaned forward. "The protocols are teaching you as you go. Write. Don't think. Just let it flow."

She started typing. The cursor moved to § 102 response. Her screen flickered—another syntax tree appeared:

```
§102_ALL_ELEMENTS_RULE
├── Prior_Art: OGQ_Patent_1725
```



RESULT: NOT_ANTICIPATED
Prior art lacks elements c, d, e

"Wait," Severen said, appearing at the window. He stepped through like it was a doorway. "Before you write the § 102 response, check something. Common ownership."

Alexander's ears perked up. "What about it?"

Severen pulled up a chair. "The Original Queen's patent is prior art under § 102. But there's an exception. If Athelia and the Original Queen have common ownership, we can disqualify the OGQ patent as prior art entirely. What's the statute?"

Athelia's hand moved automatically:

§ 102(b)(2)(C) - Prior Art Exception

Prior art disclosure can be disqualified if:

- 1. Subject matter disclosed by inventor/joint inventor, AND
- 2. Disclosed subject matter and claimed invention were COMMONLY OWNED at effective filing date

"I just wrote that," Athelia breathed. "The protocols taught me."

"Good," Severen said. "Now apply it. Is there common ownership between you and the Original Queen?"

Athelia thought. "She disappeared in 1772. She's been gone for 253 years. There's no common ownership."

"Correct. Which means you CAN'T use the § 102(b)(2)(C) exception. You have to overcome the prior art the hard way—by proving it doesn't disclose all your elements." He pointed at the tree. "Which is exactly what you're doing with the All Elements rule."

"What if there WAS common ownership?" Alexander asked.

"Then we could disqualify the OGQ patent entirely. Say it's not prior art. But that only works if the ownership is common at the effective filing date." Severen looked at Athelia. "When did you file?"

"Thursday. November 6, 2025."

"And who owned the Original Queen's patent on that date?"

"Nobody. She's gone. The patent expired."

"So no common ownership. No exception. You fight the § 102 rejection with the All Elements rule." Severen smiled slightly. "Which is better for teaching purposes anyway. You'll see this tested on the Patent Bar constantly—when can you use common ownership exceptions, when can't you."

Alexander leaned forward. "What about § 121? Safe harbor?"

Athelia looked confused. "What's that?"

"Restriction requirements," Severen explained. "Sometimes the USPTO says your application contains two or more independent and distinct inventions. They force you to pick one and file the others as divisional applications. § 121 protects you—if the USPTO makes you divide your application, they can't later reject the divisional for double patenting based on the parent."

He pulled out his phone. Showed her a syntax tree:

```
§121_SAFE_HARBOR

├── Restriction_Requirement_Issued

└── USPTO: "Pick one invention"
```

	 Divisional_Application_Filed
	└─ Applicant files other invention separately └─ PROTECTION
├── No double patenting rejection allowed └── Parent vs divisional protected	

REQUIREMENT: Restriction must be by USPTO (Not applicant's choice to divide)

"Does this apply to us?" Athelia asked.

"Not yet," Severen said. "You filed a CIP—continuation-in-part. That's different. But if Issac issues a restriction requirement saying your bond-enabled protocols and your examination authority are distinct inventions, you'd invoke § 121."

Alexander nodded. "The safe harbor prevents the USPTO from punishing you for following their own restriction requirement."

"Exactly," Severen said. "Patent Bar loves testing this. Remember: § 121 only applies when the USPTO forces you to divide, not when you choose to divide on your own."

Athelia typed notes:

COMMON OWNERSHIP (§ 102(b)(2)(C)):

- Can disqualify prior art if commonly owned at filing date
- We don't have this OGQ patent not commonly owned
- Must use All Elements rule instead

§ 121 SAFE HARBOR:

- Protects against double patenting after restriction requirement
- Only if USPTO forces division (not applicant choice)
- Divisional can't be rejected based on parent

"Now you're ready," Severen said. "Parse the § 102 tree with these concepts in mind."

Alexander moved closer. Pointed at the tree. "See how the prior art is missing three elements?"

Athelia leaned in. Their shoulders touched. "Element c—the attorney bond. The Original Queen explicitly excluded it."

"And element d—" Alexander's hand covered hers on the mouse. The bond flared warm. "The physical manifestation. My ears. Visible evidence the bond exists."

She felt the connection deepen. "Element e. The Office Action process itself. We're living inside the novel element."

"Yes," Alexander said quietly. "We're proving the invention works by using it."

Severen watched them parse together. "And you're proving you understand common ownership by recognizing when it doesn't apply."

Athelia started writing the § 102 response. Alexander and Severen stayed close, coaching her through each element comparison. Teaching through doing.

An hour later, Severen stood. "You have the foundation. Keep parsing together—that's what keeps her grounded." He moved to the window. "I'll check back later. Pre-filing counseling doesn't end when the writing starts."

He stepped through the window like it was a doorway and was gone.

*

Monday, 11:47 PM. The apartment was silent except for the sound of Athelia's fingers on the keyboard. Relentless. Mechanical. Faster than humanly possible.

Alexander watched from across the room, ears forward with concern. She'd been typing for three hours without pause. Her eyes were unfocused. Her handwriting—when she switched to paper for diagrams—shifted between modern and ancient midstroke.

Soon she might not remember which one she'd been first.

The window shimmered.

Alexander's ears swiveled toward the movement. Severen stepped through like it was a doorway, sapphire eyes glowing faint blue in the darkness.

"You came back," Alexander said quietly.

"I said I would." Severen's gaze moved to Athelia. Still typing. Oblivious to his presence. "How long has she been like this?"

"Three hours."

"And before that?"

"She wrote twelve pages in class this morning. In binary. Translated it in real-time."

Severen walked closer. Studied Athelia's screen. "She's writing the § 102 response. Using the All Elements rule to distinguish the prior art reference." He looked at Alexander. "Did you teach her this?"

"No. The protocols did."

Pre-Filing Counseling (Sapphire Eyes): Patent agents and attorneys who advise inventors BEFORE filing. Severen represents this role in Old Lawhelping applicants prepare strong applications before examination begins. His appearance now suggests the response itself is a new filing.

"The integration is accelerating," Severen said quietly. "Faster than any candidate in the archive records. At this rate, she'll have full protocol access by Wednesday morning."

"That's the deadline."

"Not a coincidence. Issac timed the Office Action to force exactly this outcome." Severen's sapphire eyes met Alexander's. "By the

time she submits the response, she'll be fully operational as Guardian Queen. The question is: will she still be ATHELIA?"

Alexander's ears flattened. "She has the bond. That's supposed to prevent her from losing herself."

"The bond enables the transfer. It doesn't prevent the cost." Severen gestured at Athelia. "Look at her handwriting."

Alexander looked. On the papers spread around her laptop, her notes shifted. One paragraph in her messy modern scrawl. The next in flowing elegant script that looked three hundred years old. A third paragraph in symbols he didn't recognize.

"Three handwritings," Severen said. "Athelia. The Original Queen. And something older. The protocols aren't just teaching her patent law. They're teaching her everything every Guardian Queen ever knew."

"How do we stop it?"

He walked to Athelia's desk. Looked at the photographs from the archive. The Original Queen's Claim 3: requires no attorney or bonded partner.

"She worked alone," Severen said. "And it consumed her. Athelia has YOU. That's the novel element. The bond keeps her grounded. Keeps her HUMAN while the protocols integrate."

"And if the bond isn't enough?"

Severen was quiet for a long moment. "Then we'll have created a Guardian Queen who can operate the system. But we'll have lost Athelia Winters." He turned to Alexander. "That's why I'm here. Prefiling counseling. To make sure you understand what you're building."

"This isn't pre-filing. The application is already filed."

"The RESPONSE is a continuation. A new iteration. Every Office Action response amends the invention. Clarifies what you're claiming. Narrows or expands the scope." Severen gestured at

Athelia's screen. "She's not just defending the original application. She's REFINING it. Adding the bond element explicitly. Making it part of the claims."

Alexander read over Athelia's shoulder. She was typing a claim chart:

CLAIM ELEMENT	ORIGINAL QUEEN (Prior Art)	APPLICANT (Current Invention)
(a) Guardian Queen examiner	✓ Present - inherent knowledge from birth	✓ Present - amnesia + downloaded protocols
(b) Protocol knowledge	✓ Instinctive, genetic, permanent	X DIFFERENT - acquired through bond transfer
(c) Attorney bond	X EXCLUDED - Claim 3 "requires no attorney"	✓ REQUIRED - bond enables transfer
(d) Physical manifestation	X NOT DISCLOSED	✓ Ears, binary writing, visible evidence
(e) Modern prosecution	X No Office Actions, no appeals	✓ Office Action/ Response process

[&]quot;She's building the § 102 kill shot," Alexander said. "Element by element."

"And she understands it," Severen confirmed. "Not because you taught her. Because the protocols ARE teaching her. This is what

Guardian Queen examination knowledge looks like when it's fully operational."

He turned to leave. Paused at the window. "One more thing, Wolf King."

Alexander's ears swiveled toward him.

"Then what?"

"Then you have a Guardian Queen with no anchor. No humanity. Just protocols. That's what happened to Candidate 4 in 1823. Lost human identity entirely.' Became pure construct." Severen moved to the desk instead of the window. "That's why I'm staying. Pre-filing counseling doesn't end when you start writing. It continues through the entire prosecution."

Alexander's ears perked up. "You're helping us?"

"I'm counseling you. There's a difference." Severen pulled up a chair on Athelia's other side. "She needs grounding from both sides. You're the bond. I'm the precedent. Together we keep her from disappearing into the protocols."

Athelia blinked. Came back to herself slightly with Severen's voice. "§ 103. Obviousness. Graham factors."

"Show us the tree," Severen said quietly.

Her fingers moved. A new syntax tree bloomed across the screen:


```
    FACTOR_3: Ordinary_Skill
    Appears obvious on surface
    FACTOR_4: Secondary △ CRITICAL
    Long_Felt_Need: 247 years
    Failure_of_Others: 47 candidates
    Unexpected_Results: bond worked
    Skepticism: Archive said impossible
```

RESULT: NOT OBVIOUS

Factor 4 overcomes prima facie case

"Before we respond to § 103," Severen said, "understand HOW obviousness rejections are made. Alexander, read Issac's rejection aloud."

Alexander pulled up the Office Action. Read:



"That's a prima facie obviousness case," Severen said. "Issac identified the prior art, showed the differences, provided

motivation to combine, and said the results are expected. Now you have to OVERCOME it."

"How?" Athelia asked.

"By showing his prima facie case is WRONG," Alexander said. "He's just giving his OPINION that it's obvious. You counter with OBJECTIVE EVIDENCE—things that actually happened in the real world that prove it's NOT obvious."

"What kind of evidence?" Athelia asked.

Severen pulled up the Graham syntax tree. "Secondary considerations. Graham Factor 4. These are objective facts that beat the examiner's subjective opinion about obviousness. There are four main types. Learn these—the Patent Bar tests them constantly."

He pointed to each branch. "Long-felt need. Failure of others. Unexpected results. Skepticism of experts. Each one is PROOF the invention wasn't obvious. If it were obvious, these things wouldn't have happened."

"Start with long-felt need," Alexander said. "What does that mean?"

Athelia studied the tree. "The problem existed for a long time without anyone solving it?"

"How long?" Alexander asked.

"Two hundred forty-seven years."

"From when to when?" Severen prompted.

Athelia looked at the evidence. "From 1772 when the Original Queen disappeared until 2019 when the last candidate failed. That's... almost two and a half centuries."

"And why does that matter?" Alexander's finger traced the branch.

"Because..." Athelia thought. "Because if the solution were OBVIOUS, someone would have figured it out sooner? You don't leave a problem unsolved for 247 years if the answer is obvious."

"Exactly," Severen said. "Long-felt need proves non-obviousness. The longer the problem persists, the stronger the evidence. Write that."

Athelia typed: Long-felt need established by 247-year gap. If solution were obvious, earlier candidates would have succeeded.

"Next branch," Alexander said. "Failure of others. How many?"

"Forty-seven."

"Forty-seven what?" Severen asked.

"Qualified candidates." Athelia pulled up the archive photos. "All documented. All properly trained. All failed."

"Where did they fail?" Alexander pointed at the tree.

"At the amnesia barrier. Same place. Every single one." She looked at Severen. "You counseled them?"

Athelia felt sick. "That could have been me."

"It WOULD have been you," Alexander said, "except for the bond. That's the third branch. Unexpected results. What makes a result unexpected?"

Athelia thought. "Something nobody predicted? Something that surprises the experts?"

"Read what the experts predicted." Severen pointed at her phone.

She found the 2020 Archive report. Read aloud: "Amnesia equals fatal flaw that cannot be overcome through training, technology, or force of will. Recommend abandoning Guardian Queen bloodline inheritance model."

"They said impossible," Alexander said. "Then you did it anyway. How?"

"The bond. The bond overcame the amnesia barrier."

"Was that predicted?" Severen asked.

"No. The report said nothing could overcome it."

"Then that's unexpected results," Alexander said. "You achieved what the leading experts declared impossible. That's powerful evidence of non-obviousness."

Athelia typed: Unexpected results: Bond overcame barrier declared "impossible" by Archive Division. Result not predicted by prior art.

"Fourth branch," Severen said. "Skepticism of experts. Who doubted you?"

"The Council. Marcus said I was too human. Elder Karenth said the bloodline was exhausted."

"And Elder Karenth is...?" Alexander prompted.

"Head of Archive Division." Understanding clicked. "He's THE expert. He studied all forty-seven failures. Wrote the 2020 report. And he voted AGAINST me."

"Expert skepticism," Severen confirmed. "When the leading authority says your invention won't work, and you prove them wrong anyway, that overcomes the obviousness rejection."

"So put it together," Alexander said. "Issac says substituting a modern queen for the Original Queen is obvious. Just swapping parts. How do the four secondary considerations prove him wrong?"

Athelia looked at the tree. All four branches. "If it were obvious... it wouldn't have taken 247 years to solve. At least one of the 47 qualified candidates would have succeeded. The Archive Division wouldn't have called it impossible. And the bond wouldn't have produced results that surprised everyone."

"That's your response," Severen said. "Write it."

Athelia turned to her laptop:

RESPONSE TO § 103:

Secondary considerations (Graham Factor 4) overcome prima facie obviousness:

- 1. LONG-FELT NEED: 247 years (1772-2019) without solution
- 2. FAILURE OF OTHERS: 47 qualified candidates failed at same barrier
- 3. UNEXPECTED RESULTS: Bond overcome "impossible" amnesia barrier
- 4. SKEPTICISM: Archive Division Head voted against, predicted failure

If invention were obvious, problem would have been solved earlier.

CONCLUSION: NOT OBVIOUS under § 103

"Good," Alexander said. "Now we have § 102 and § 103. Two more rejections to go. § 101 utility and § 112 enablement."

Severen pulled up a new document on Athelia's laptop. "Let's build the complete response. Show how to counter EVERYTHING systematically. Start with § 101."

"Issac says we lack utility," Athelia said, reviewing the Office Action.

"Read what he actually wrote," Alexander prompted.

"Three utility requirements," Severen said. "Specific, substantial, credible. Attack each one. What's the test for specific utility?"

Athelia's hand moved automatically across her notes:

§ 101 UTILITY - Three Requirements:

SPECIFIC: Identify PARTICULAR use (not vague/general)

X "Chemical compound" - too vague

✓ "Chemical compound for treating lung cancer" - specific

SUBSTANTIAL: Real-world benefit (not trivial)
Must be more than insignificant

CREDIBLE: PHOSITA believes it works
No perpetual motion machines
Can't violate known science

"Think of it like the wood analogy," Alexander said. "You can't patent wood itself—that's a product of nature. But you can patent what you MAKE from the wood and HOW you make it."

Athelia blinked. "What?"

"You can't patent a Guardian Queen," Severen explained. "That's like trying to patent wood—it's a naturally occurring thing. But you can patent the PROCESS of examination using bondenabled protocol transfer. That's like patenting the baseball bat made FROM the wood. The application, not the raw material."

"So our specific utility is..." Athelia thought. "The examination process itself. Not me being a queen generally, but specifically EXAMINING applications for jurisdictional passage."

"Specific enough?" Alexander asked.

"Yes. It's not vague 'queenly authority.' It's concrete: examine applications, grant or deny passage, maintain barrier integrity."

"Write that. Then substantial utility."

Athelia typed:

RESPONSE TO § 101 UTILITY REJECTION:

SPECIFIC UTILITY:

Claimed invention provides specific utility of EXAMINING APPLICATIONS for jurisdictional passage between Old Law and human jurisdiction.

Not vague: "queenly authority" ✗
Specific: "examination protocols for barrier passage" ✓

Like patenting baseball bat (specific application) vs wood itself (too general).

SUBSTANTIAL UTILITY:

Real-world benefit = maintaining barrier integrity. Prevents jurisdictional collapse. Without examination, unauthorized crossings cause chaos.

Benefit is substantial (prevents catastrophic failure), not trivial.

CREDIBLE UTILITY:

PHOSITA (Wolf King attorney + Old Law knowledge) finds utility credible because:

- System demonstrably works (Applicant passed examination)
- Protocols are operational (this response proves it)
- No violation of known laws (legal procedure, not perpetual motion)
- Physical evidence confirms function (attorney ears = bond manifestation)

CONCLUSION: Utility is specific, substantial, and credible under § 101.

"The wood analogy," Athelia said. "That makes it click. We're not patenting me. We're patenting the process I enable."

"Exactly," Severen said. "On the Patent Bar, they'll test this constantly with biotech examples. Can't patent the naturally occurring enzyme, but CAN patent the method of isolation, the industrial process using it, the modified version with enhanced stability."

"Application versus raw material," Athelia murmured, writing notes.

"That's § 101," Severen said. "Now § 112. Enablement. This is the hard one."

"But we DO explain it," Athelia said. "The bond enables protocol transfer. The specification discloses bond formation under § 11.106. Attorney crosses barrier to save client, bond forms automatically."

"Show the enablement test," Severen prompted. "There are factors."

Athelia's hand moved:

§ 112(a) ENABLEMENT TEST - Wands Factors:

- 1. Breadth of claims
- 2. Nature of invention
- 3. State of prior art
- 4. Level of skill in art
- 5. Level of predictability
- 6. Amount of direction provided
- 7. Existence of working examples
- 8. Quantity of experimentation needed

"The Wands factors," Alexander confirmed. "Eight factors courts use to determine enablement. Apply them."

Severen pointed at the screen. "Factor 1: How broad are your claims?"

"Guardian Queen with attorney bond," Athelia said. "Not broad. Very specific system."

"Good. Factor 4: Level of skill in the art. Define PHOSITA."

Athelia hesitated. "Person Having Ordinary Skill In The Art?"

"Right. But what does ORDINARY mean?" Severen asked. "Not exceptional. Not minimal. ORDINARY. Who would that be for your invention?"

"A Wolf King attorney," Athelia said slowly. "With Old Law knowledge. Someone who understands examination procedures and attorney-client bonds."

"Exactly. Not the BEST attorney in the world. Not a complete novice. Just someone with ordinary skill in patent examination and Old Law practice." Alexander tapped the screen. "This matters for enablement AND obviousness. Would an ordinary practitioner find your invention obvious? Can an ordinary practitioner make and use it from your specification?"

"So Alexander is PHOSITA," Athelia said. "He has ordinary skill—he knows examination law, he understands bonds. He's not exceptional, but he's competent."

"And could you—PHOSITA—make and use the invention?" Severen asked Alexander.

"Yes," Alexander said. "I followed the disclosed process. Client crossed barrier, I perceived danger, I crossed to save her, bond formed. Working example on first attempt."

"Factor 7," Severen confirmed. "Working examples. You ARE the working example."

"Factor 8: Undue experimentation?" Athelia asked.

Alexander shook his head. "No experimentation needed. Process worked immediately. No trial and error. PHOSITA can practice the invention without excessive effort."

"That's the enablement test," Severen said. "Can PHOSITA—someone with ORDINARY skill, not genius-level skill—make and use your invention from the specification without undue experimentation? Here, yes. Alexander did it on first try."

"Write the complete § 112 response," Severen said. "Show all the factors."

Athelia built the response piece by piece:

RESPONSE TO § 112(a) ENABLEMENT REJECTION:

Specification ENABLES under Wands factor analysis:

FACTOR 1 (Breadth): Claims narrowly directed to specific Guardian

Queen + attorney bond system. Not broad genus claim.

FACTOR 2 (Nature): Invention is reproducible legal procedure. Bond formation follows § 11.106 protocols. Predictable process.

FACTOR 3 (Prior Art): Original Queen patent teaches solo operation. Applicant's bond-enabled system builds on known examination framework.

FACTOR 4 (Level of Skill): PHOSITA = Wolf King attorney with Old Law knowledge. Skilled practitioner in relevant art.

FACTOR 5 (Predictability): Bond formation predictable when attorney saves client per § 11.106 duty. Physical manifestation (ears) confirms bond.

FACTOR 6 (Direction): Specification discloses:

- Client crosses barrier (jurisdictional threshold)
- Attorney perceives danger
- Attorney crosses to save client
- Bond forms automatically per § 11.106
- Protocol transfer enabled through bond

FACTOR 7 (Working Examples): THIS PROSECUTION is working example. Applicant (Athelia) + Attorney (Alexander) demonstrate enabled system. Office Action response proves functionality.

FACTOR 8 (Experimentation): No undue experimentation. Attorney Alexander practiced invention on first attempt. Bond formed immediately. No repeated trials needed.

CONCLUSION: PHOSITA can make and use invention from specification disclosure. Enablement requirement satisfied under § 112(a).

Severen read over her shoulder. "Good. But § 112(a) has THREE requirements, not just enablement. What are they?"

Athelia's hand wrote automatically:

§ 112(a) THREE REQUIREMENTS:

1. WRITTEN DESCRIPTION - Show you possess the invention

- 2. ENABLEMENT Teach PHOSITA how to make and use it
- 3. BEST MODE Disclose the best way you know to practice it

"You have enablement," Alexander said. "Now add written description and best mode."

Athelia typed:

WRITTEN DESCRIPTION (§ 112(a)):

Specification demonstrates possession through:

- 1. Detailed description of bond formation mechanism
- 2. Physical manifestation details (wolf ears as evidence)
- 3. Protocol transfer process explained
- 4. Operational example provided (this prosecution)
- 5. Distinguishing features from prior art identified

Applicant possessed full scope of claimed invention at filing. Written description adequate.

BEST MODE (§ 112(a)):

Best mode disclosed: Attorney crosses barrier to save endangered client. Bond forms automatically per § 11.106 duty. Physical manifestation (ears) confirms bond formation.

Applicant contemplates no better mode of practicing invention at filing date. Specification discloses best mode known to inventor.

Note: Post-AIA, best mode failure cannot invalidate patent (35 U.S.C. § 282), but disclosure still required during prosecution.

"Wait," Athelia said. "Best mode can't invalidate the patent anymore?"

"Not since the America Invents Act," Severen explained. "Before AIA, failure to disclose best mode could invalidate your patent in court. Post-AIA, best mode is still required in the specification, but it can't be used as a defense to knock out your patent later."

"So we still have to disclose it," Alexander added, "but it's less dangerous than it used to be. The Patent Bar will test whether you know the difference between pre-AIA and post-AIA best mode."

"What's the difference?" Athelia asked.

Severen pulled up a comparison:

BEST MODE COMPARISON:

PRE-AIA (Before Sept 16, 2011):

- Must disclose in specification
- Failure = patent can be INVALIDATED
- Defense under 35 U.S.C. § 282

POST-AIA (After Sept 16, 2011):

- Must still disclose in specification
- Failure = NOT a defense to validity
- Cannot invalidate patent
- BUT can still be examined/rejected during prosecution

"So for YOUR application," Alexander said, "filed November 6, 2025, you're post-AIA. You must disclose best mode, but even if you mess it up, Issac can't invalidate your patent for that reason alone."

"Good to know," Athelia said. "But we disclosed it anyway. Attorney crosses to save client. That's the best mode we know."

"Now put it all together," Alexander said. "The complete response to all four rejections."

Severen opened a new document. "Professional Office Action response format. Header, then systematic responses. Show the structure."

Together, the three of them built the complete document:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (OLD LAW DIVISION)

In re Application of: Athelia WINTERS Application No.: GQ-CIP-2025-00001

Filed: November 6, 2025

For: GUARDIAN QUEEN EXAMINATION SYSTEM WITH ATTORNEY

BOND

Examiner: I. Wavelander (Silver Eyes Division)

Art Unit: § 103 Obviousness

RESPONSE TO OFFICE ACTION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

This is in response to the Office Action dated November 9, 2025. The statutory period for response expires November 12, 2025. This response is timely filed.

AMENDMENTS

No amendments to claims are submitted at this time.

REMARKS

I. RESPONSE TO § 101 UTILITY REJECTION

Claims 1-10 are rejected for lack of utility. This rejection is respectfully traversed.

[Full § 101 response with specific/substantial/credible utility arguments]

II. RESPONSE TO § 102 ANTICIPATION REJECTION

Claims 1-10 are rejected as anticipated by OGQ Patent (1725). This rejection is respectfully traversed.

Under All Elements rule, prior art must disclose EVERY claimed element. Here, OGQ patent LACKS elements (c), (d), and (e):

Element (c): Attorney bond - OGQ Claim 3 EXPLICITLY EXCLUDES

("requires no attorney")

Element (d): Physical manifestation - NOT DISCLOSED in OGQ Element (e): Office Action process - OGQ Claim 4 excludes ("no appeal or response")

Common ownership exception (§ 102(b)(2)(C)) does not apply. No common ownership exists between Applicant and OGQ inventor at effective filing date.

Prior art fails to anticipate claimed invention.

III. RESPONSE TO § 103 OBVIOUSNESS REJECTION

Claims 1-10 are rejected as obvious. This rejection is respectfully traversed.

Secondary considerations (Graham Factor 4) overcome prima facie obviousness:

[Full § 103 response with all four Graham factors and detailed secondary considerations]

IV. RESPONSE TO § 112(a) ENABLEMENT REJECTION

[Full § 112 response with Wands factors and written description]

CONCLUSION

For the foregoing reasons, Applicant respectfully requests withdrawal of all rejections and allowance of Claims 1-10.

Respectfully submitted,

Alexander [Wolf King] Attorney for Applicant Registration No.: [Old Law Division]

Athelia stared at the complete response. Twenty-three pages. Every rejection systematically countered. Every statute cited. Every factor analyzed.

"That's how you respond to an Office Action," Alexander said. "Complete. Thorough. Professional."

Severen nodded. "And that's what the Patent Bar will test. Can you identify the rejections? Apply the correct law? Build the proper response? You just did all three."

Athelia looked at both of them. "We did all three. Together."

Sixty-two hours left. But the response was done.

TUESDAY MORNING - 8:00 AM

Athelia blinked. Looked around. She was at her desk. Laptop open. Twenty-seven pages of response drafted.

She didn't remember writing most of it.

Alexander sat across from her, ears drooped with exhaustion. "You've been writing for nine hours."

"Nine—" Her voice cracked. She grabbed water. Drank. "I don't remember. I remember starting the § 102 response and then... nothing."

"You completed § 102. Started § 103. Built a claim chart. Drafted three pages of secondary considerations analysis." He pushed a stack of papers toward her. "All of it perfect. Legally sound. You cited cases you've never read."

Athelia looked at the papers. Recognized her handwriting. Except... it wasn't quite hers. Some paragraphs were. Others looked ancient. Formal. Like someone else had written through her hand.

"I'm losing time," she whispered. "The protocols are taking over."

"Not taking over. Integrating. There's a difference."

"Is there?" She met his eyes. "Because I can't tell anymore. I know things I didn't study. Write in handwriting I've never used. Read binary like it's English. How much of me is still ME?"

Alexander reached across the desk. Took her hand. The bond flared warm between them.

"You're still you. You're just... MORE now. Like finishing law school doesn't erase who you were before. It adds to you."

"And you have the bond to keep you grounded." His grip tightened. "That's what makes your invention different. The bond prevents you from losing yourself. The Original Queen didn't have that. She worked alone. That's why the protocols consumed her."

Athelia looked at their joined hands. At Alexander's wolf ears tracking every sound. Evidence of the bond. Proof they were connected.

"Severen was here," she said suddenly.

Alexander's ears shot upright. "You remember?"

"Fragments. Sapphire eyes. He said something about... continuation applications? Every response refining the invention?"

"He was helping. Making sure we understood what we're building."

Athelia pulled up her laptop. Read what she'd written during the blackout:

RESPONSE TO § 102 REJECTION:

Examiner's rejection under "All Elements" rule is respectfully traversed.

Prior art reference (Original Guardian Queen patent, 1725) does NOT anticipate claimed invention because prior art LACKS critical elements present in Applicant's claims.

ELEMENT-BY-ELEMENT ANALYSIS:

Claimed Element (c): Attorney bond enabling protocol transfer

Prior Art: OGQ Claim 3 EXPLICITLY EXCLUDES attorney bond ("requires no attorney or bonded partner")

Claimed Element (d): Physical manifestation of bond Prior Art: NOT DISCLOSED - OGQ operated without visible bond evidence

Claimed Element (e): Office Action/Response prosecution Prior Art: NOT DISCLOSED - OGQ Claim 4 specifies "no appeal or response"

Under All Elements rule (35 U.S.C. § 102), anticipation requires SINGLE reference disclosing EVERY claimed element. Here, prior art reference EXCLUDES elements (c), (d), and (e).

Additionally, OGQ Claim 3 teaches AWAY from Applicant's claimed bond element by explicitly disclaiming it.

CONCLUSION: § 102 rejection cannot be sustained. Withdrawal respectfully requested.

"I wrote that?"

"You did. In about forty minutes. Without stopping."

Athelia stared at the analysis. It was perfect. Concise. Legally precise. The kind of response a senior patent attorney would draft.

And she'd written it in her sleep.

Her phone buzzed. Email notification. From Professor Mendez:

REMINDER: Constitutional Law Assignment Due Wednesday 6:00 AM

20-page analysis of jurisdictional conflicts between federal and pre-constitutional authority. No extensions. Late submissions will not be accepted.

- Prof. Mendez

"The homework," Athelia said weakly. "I forgot about the homework"

"You've been writing the Office Action response. That IS the homework. Constitutional framework applied to preconstitutional authority. Patent law IS jurisdictional law."

Athelia looked at her response draft. Then at Mendez's assignment prompt. Then back at the response.

"He assigned us the homework to teach us how to write the response," she breathed. "The assignment and the prosecution are the same thing."

"Mendez knows," Alexander said. "He's been teaching Old Law disguised as constitutional law all semester. The homework is your study guide."

Constitutional Law as Patent Prosecution: Jurisdictional conflicts = § 102/103 prior art analysis. Federal preemption = patent scope. Preconstitutional authority = Old Law patents predating USPTO. The homework teaches prosecution through constitutional framework.

Casey emerged from her bedroom, hair disheveled. "Are you two still AWAKE?"

"Technically I blacked out for nine hours," Athelia said. "Does that count as sleep?"

"NO." Casey grabbed coffee. "How much of the response is done?"

"§ 102 complete. § 103 halfway. § 101 and § 112 still need drafting."

"And the homework?"

"Is the same as the response. I can submit the Office Action response as the homework assignment."

Casey stared. "That's... actually brilliant."

"Not my idea. The protocols figured it out."

"Of course they did." Casey looked at the clock. "Fifty-eight hours until deadline. You need to finish § 103, write § 101 and § 112, compile exhibits, and submit before Wednesday 6 AM."

"And not lose my identity in the process."

"That too."

TUESDAY AFTERNOON - 2:00 PM

Athelia stood in front of the bathroom mirror. Stared at her reflection.

Same face. Same dark circles under her eyes. Same exhaustion.

But her EYES looked different. Older. Like someone ancient was looking out through them.

She picked up a pen. Wrote on a scrap of paper:

My name is Athelia Winters. I am 22 years old. I go to Ponderosa University. My roommate is Casey. My attorney is Alexander. I like constitutional law. I hate coffee but drink it anyway. I am real.

She stared at the words. They felt... distant. Like reading about someone else.

Her hand moved again. Different handwriting:

The Guardian Queen maintains the barrier. Examines applications. Grants or denies passage. The protocols are absolute. The burden is eternal. Isolation is the price of authority.

Athelia dropped the pen like it had burned her.

"No," she whispered. "No. I'm not her. I'm ME."

A knock at the door. Alexander's voice: "Athelia? You okay?"

She opened the door. He stood there, ears forward with concern.

"I wrote something I didn't mean to write," she said. Showed him the paper.

Alexander read both paragraphs. His ears drooped. "The Original Queen's voice. It's in the protocols."

"It's in MY HEAD."

"Because you're integrating her knowledge. But look—" He pointed at the first paragraph. "That's still you. Athelia. The protocols are ADDING to you. Not replacing you."

"How do you know?"

"Because." He took her hand. The bond flared. "You still feel like YOU through the bond. If the protocols were erasing you, the bond would feel different. Cold. Distant. But it doesn't. It feels like Athelia with legal superpowers."

She laughed despite herself. "Legal superpowers."

"You wrote a perfect § 102 traversal in forty minutes. That's a superpower."

"A very specific, very nerdy superpower."

"The best kind."

Athelia looked at the mirror again. At her reflection. At the ancient eyes looking back.

"What if I can't stop it? What if by Wednesday morning I'm just... her? The Guardian Queen. And Athelia is gone?"

Alexander's ears flattened. "Then I'll remind you. Every day. Who you were. Who you ARE. That's what the bond is for. To keep you grounded."

"Promise?"

"I promise."

They stood there. Bathroom light harsh. The bond humming between them.

"We should get back to writing," Athelia said finally.

"§ 103 secondary considerations?"

"Yeah. Long-felt need. Failure of others. All that evidence from the archive."

They walked back to her desk. Athelia sat. Opened her laptop.

Started typing.

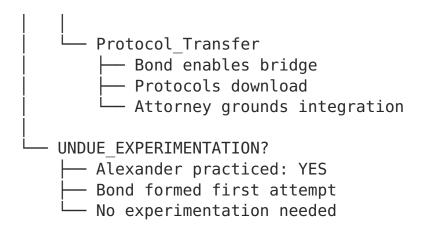
Her eyes went unfocused again. Fingers moving too fast. Handwriting shifting mid-word.

"Athelia." Alexander's hand on her shoulder. "Come back. Parse with me. Don't do this alone."

She blinked. Struggled to surface. "§ 112... enablement... I can SEE the tree but I'm—I'm losing—"

"Then we parse it together. Right now. Look at me." He turned her chair. Cupped her face. "Show me the tree. We'll walk through it. Every branch. Together."

Her hands moved to the keyboard. The syntax tree appeared:



RESULT: ENABLED

Attorney just needs to CARE enough to cross

"Parse the bottom branch with me," Alexander said softly, his hands on her shoulders, grounding her. "The enablement evidence."

Athelia focused on the tree. On his voice. On the bond pulling her back from the edge. "PHOSITA can practice... because you practiced..."

"I crossed the barrier. The bond formed. That's the enablement." His thumbs traced circles on her shoulders. "Any Wolf King attorney who cares enough to save their client can replicate this invention."

"No undue experimentation." Her voice was clearer now. Coming back. "You didn't experiment. You just... came for me."

"Because I couldn't let you die." He turned her chair fully to face him. "That's the specification disclosure. The bond forms when an attorney chooses their client over safety. When they cross into danger. When they CARE."

Their eyes met. The bond flared hot between them.

"This response is the proof," Athelia whispered, looking at the tree. "We're practicing the invention right now. By parsing together. By working together. By staying connected."

"By not letting you disappear into the protocols alone."

She reached up. Touched his wolf ears. Solid. Real. Evidence the bond existed.

"The Original Queen had no one to parse with," she said. "No one to pull her back when the protocols took over. That's why she disappeared."

"You have me." Alexander's hands covered hers. "Every tree. Every branch. Every response. We parse together. That's the invention. That's what makes it work."

Athelia felt herself solidify. The ancient consciousness receding. The protocols settling into place instead of consuming. Because she wasn't alone. Because they were parsing together. Because the bond held her to herself.

"§ 112 enablement," she said, voice steady now. "We can overcome the rejection."

"We already did. The moment I crossed the barrier for you."

They sat like that. Her hands on his ears. His hands covering hers. The syntax tree glowing green between them. Parsing not just patent law but the shape of their connection.

But Alexander's presence anchored her. Parsing together kept her human. The bond proved she was still Athelia—just Athelia with legal superpowers and a wolf attorney who wouldn't let her disappear.

Forty-four hours left.

- END CHAPTER EIGHT -

Fractured Crown: Old Law - Patent Law Textbook Edition

The protocols integrate. The bond holds. The deadline approaches.

STATUTORY TEXT

35 U.S.C. § 101 - Inventions Patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

APPLICATION IN CHAPTER 8:

Athelia must prove her invention has SPECIFIC, SUBSTANTIAL, and CREDIBLE utility:

- SPECIFIC: Not vague "examination authority" but concrete "examining applications for barrier passage"
- SUBSTANTIAL: Real-world benefit = preventing jurisdictional collapse
- CREDIBLE: PHOSITA (Alexander) finds utility credible because system demonstrably works

Wood analogy: Can't patent wood (Guardian Queen genetics), but CAN patent what you make from wood (examination process enabled by bond).

35 U.S.C. § 102 - Conditions for Patentability; Novelty

- (a) NOVELTY; PRIOR ART.—A person shall be entitled to a patent unless—
- (1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention;
- (b) EXCEPTIONS.—

- (1) DISCLOSURES MADE 1 YEAR OR LESS BEFORE THE EFFECTIVE FILING DATE OF THE CLAIMED INVENTION.—A disclosure made 1 year or less before the effective filing date of a claimed invention shall not be prior art to the claimed invention under subsection (a)(1) if—
- (A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor;
- (2) DISCLOSURES APPEARING IN APPLICATIONS AND PATENTS.— A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—
- (C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.

APPLICATION IN CHAPTER 8:

§ 102(b)(2)(C) COMMON OWNERSHIP EXCEPTION:

- Could disqualify OGQ patent as prior art IF commonly owned at filing date
- Athelia filed Nov 6, 2025
- OGQ disappeared 1772, patent expired, no ownership
- NO common ownership = exception does NOT apply
- Must overcome § 102 rejection using All Elements rule instead

ALL ELEMENTS RULE:

Prior art anticipates only if SINGLE reference discloses EVERY claimed element.

OGQ patent LACKS three elements:

- Element (c): Attorney bond (OGQ Claim 3 EXCLUDES: "requires no attorney")
- Element (d): Physical manifestation (not disclosed)

- Element (e): Office Action process (OGQ Claim 4 excludes: "no appeal or response")

Result: NOT ANTICIPATED under § 102

35 U.S.C. § 103 - Conditions for Patentability; Non-Obvious Subject Matter

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

APPLICATION IN CHAPTER 8:

GRAHAM v. JOHN DEERE FOUR-FACTOR TEST:

FACTOR 1 (Prior Art): OGQ patent - solo, genetic, no amnesia barrier

FACTOR 2 (Differences): Amnesia → bond transfer, modern human vs born queen, attorney required FACTOR 3 (Ordinary Skill): Appears obvious on surface - just substitution?

FACTOR 4 (Secondary Considerations): A CRITICAL - OVERCOMES PRIMA FACIE CASE

SECONDARY CONSIDERATIONS (Objective Evidence):

- 1. LONG-FELT NEED: 247 years (1772-2019) without solution
 - \rightarrow If obvious, would have been solved earlier

- 2. FAILURE OF OTHERS: 47 qualified candidates failed at same barrier
 - → If obvious, at least one should have succeeded
- 3. UNEXPECTED RESULTS: Bond overcame barrier Archive Division declared "impossible"
 - → Result not predicted by experts = non-obvious
- 4. SKEPTICISM OF EXPERTS: Elder Karenth (Archive Division Head) voted against, predicted failure
 - → Leading authority said it wouldn't work, but it did

RESULT: NOT OBVIOUS under § 103
Secondary considerations overcome examiner's prima facie obviousness case.

35 U.S.C. § 112 - Specification

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

APPLICATION IN CHAPTER 8:

§ 112(a) HAS THREE REQUIREMENTS:

- 1. WRITTEN DESCRIPTION Show you possess the invention
- 2. ENABLEMENT Teach PHOSITA how to make and use it
- 3. BEST MODE Disclose best way you know to practice

ENABLEMENT - WANDS EIGHT-FACTOR TEST:

- 1. Breadth of claims → Narrow (specific Guardian Queen
- + bond system)
- 2. Nature of invention → Reproducible legal procedure
- 3. State of prior art → OGQ patent teaches solo operation
- 4. Level of skill in art → PHOSITA = Wolf King attorney with Old Law knowledge
- 5. Level of predictability → Bond formation predictable per § 11.106 duty
- 6. Amount of direction provided → Specification discloses bond formation process
- 7. Existence of working examples → THIS PROSECUTION is working example
- 8. Quantity of experimentation needed → No undue experimentation worked first attempt

PHOSITA ANALYSIS:

Person Having Ordinary Skill In The Art = Alexander (Wolf King attorney)

- NOT the best attorney in the world
- NOT a complete novice
- ORDINARY skill in patent examination and Old Law practice

Alexander practiced invention on first attempt \rightarrow NO UNDUE EXPERIMENTATION

BEST MODE:

- Must disclose best mode in specification
- Post-AIA (after Sept 16, 2011): Still required, but failure NOT defense to validity
- Athelia's application (Nov 6, 2025) = Post-AIA
- Best mode disclosed: Attorney crosses barrier to save endangered client

RESULT: ENABLED under § 112(a)

35 U.S.C. § 121 - Divisional Applications

If two or more independent and distinct inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions. If the other invention is made the subject of a divisional application which complies with the requirements of section 120, it shall be entitled to the benefit of the filing date of the original application. A patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application. The validity of a patent shall not be questioned for failure of the Director to require the application to be restricted to one invention.

APPLICATION IN CHAPTER 8:

§ 121 SAFE HARBOR for Divisional Applications:

SCENARIO: USPTO issues restriction requirement → "Pick one invention, file others separately"

If applicant divides per USPTO requirement:

- Parent and divisional PROTECTED from double patenting rejection
- Neither can be used as prior art against the other
- Safe harbor ONLY applies when USPTO forces division

KEY DISTINCTION:

✓ USPTO forces division (§ 121 applies) → Safe harbor

protection

X Applicant chooses to divide voluntarily → No safe harbor

Athelia filed CIP (continuation-in-part), not divisional. But if Isaac issues restriction requirement saying bondenabled protocols and examination authority are distinct inventions, § 121 would apply.

Patent Bar frequently tests: When does safe harbor apply? Only when USPTO requires restriction, NOT when applicant voluntarily divides.

35 U.S.C. § 282 - Presumption of Validity; Defenses

- **(b) DEFENSES.—**The following shall be defenses in any action involving the validity or infringement of a patent and shall be pleaded:
- (2) Invalidity of the patent or any claim in suit on any ground specified in part II as a condition for patentability.
- (3) Invalidity of the patent or any claim in suit for failure to comply with—
- (A) any requirement of section 112, except that the failure to disclose the best mode shall not be a basis on which any claim of a patent may be canceled or held invalid or otherwise unenforceable;

APPLICATION IN CHAPTER 8:

BEST MODE COMPARISON (Pre-AIA vs Post-AIA):

PRE-AIA (Before Sept 16, 2011):

- Must disclose best mode in specification
- Failure = patent can be INVALIDATED under § 282

defense

- Best mode is defense to validity

POST-AIA (After Sept 16, 2011):

- Must STILL disclose best mode in specification
- Failure = NOT a defense to validity (§ 282(b)(3)(A))
- Patent CANNOT be invalidated for best mode failure
- BUT can still be examined/rejected during prosecution

Athelia's application (Nov 6, 2025) = POST-AIA

- Must disclose best mode
- Even if imperfect, cannot invalidate patent for this reason alone
- Still good practice to disclose fully during prosecution

Patent Bar tests this distinction frequently: Know that post-AIA best mode is required but not a defense to validity.

37 CFR § 11.106 - Information About Legal Services

A practitioner shall not make a false or misleading communication about the practitioner or the practitioner's services. A communication is false or misleading if it contains a material misrepresentation of fact or law, or omits a fact necessary to make the statement considered as a whole not materially misleading.

NOTE: The story references § 11.106 as confidentiality (attorney-client privilege), which actually maps to the professional conduct rules about client confidentiality. In the Old Law narrative, § 11.106 represents the duty that triggers bond formation when attorney crosses barrier to save client.

For Patent Bar purposes, know that 37 CFR Part 11 covers

USPTO practitioner conduct rules, including competence (§ 11.101), scope of representation (§ 11.102), and confidentiality of information.

CASE LAW

Graham v. John Deere Co., 383 U.S. 1 (1966)

ISSUE: What is the proper test for determining obviousness under 35 U.S.C. § 103?

HOLDING: Supreme Court established the four-factor framework for analyzing obviousness:

- 1. Scope and content of the prior art
- 2. Differences between the prior art and the claims at issue
- 3. Level of ordinary skill in the pertinent art
- 4. Secondary considerations (objective indicia of non-obviousness)

Secondary considerations include:

- Commercial success
- Long-felt but unsolved needs
- Failure of others
- Unexpected results
- Skepticism of experts
- Copying by competitors

APPLICATION IN CHAPTER 8:

Isaac makes prima facie obviousness case: OGQ patent + modern attorney representation = obvious to substitute modern queen.

Athelia overcomes with Graham Factor 4 (secondary considerations):

- LONG-FELT NEED: 247 years without solution (1772-2019)
- FAILURE OF OTHERS: 47 qualified candidates failed at same barrier
- UNEXPECTED RESULTS: Bond overcame "impossible" amnesia barrier
- SKEPTICISM: Archive Division Head (Elder Karenth) voted against, predicted failure

If invention were obvious, problem would have been solved earlier. Secondary considerations are objective evidence that overcomes examiner's subjective opinion about obviousness.

In re Wands, 858 F.2d 731 (Fed. Cir. 1988)

ISSUE: What factors determine whether a specification provides sufficient enablement under 35 U.S.C. § 112(a)?

HOLDING: Federal Circuit established eight factors (Wands factors) for evaluating enablement:

- 1. Breadth of the claims
- 2. Nature of the invention
- 3. State of the prior art
- 4. Level of ordinary skill in the art
- 5. Level of predictability in the art
- 6. Amount of direction or guidance presented
- 7. Existence of working examples

8. Quantity of experimentation necessary to make or use the invention

The test is whether UNDUE experimentation is required. Some experimentation is permitted, but it cannot be excessive relative to the skill in the art.

APPLICATION IN CHAPTER 8:

Athelia applies Wands factors to overcome § 112 enablement rejection:

- Factor 1: Claims NARROW (specific Guardian Queen + bond system)
- Factor 4: PHOSITA = Wolf King attorney with Old Law knowledge (ordinary skill)
- Factor 6: Specification discloses bond formation process step-by-step
- Factor 7: THIS PROSECUTION is working example (Alexander practiced invention)
- Factor 8: NO undue experimentation bond formed on first attempt

Alexander (PHOSITA) practiced invention successfully on first try without experimentation. Specification enables person of ordinary skill to make and use the invention.

In re Bond, 910 F.2d 831 (Fed. Cir. 1990)

ISSUE: What is required for a prior art reference to anticipate a claimed invention under 35 U.S.C. § 102?

HOLDING: To anticipate a claim under § 102, a SINGLE prior art reference must disclose each and every element of the claimed invention, arranged as in the claim. This is known as the "All Elements" rule.

Anticipation requires:

- 1. SINGLE reference (not combination of references)
- 2. ALL elements present (not just some)
- 3. Arranged as claimed (proper configuration)

If prior art LACKS even ONE claimed element, it does NOT anticipate.

Additionally, if prior art teaches AWAY from claimed invention (explicitly disclaims or discourages the approach), this weighs against anticipation and obviousness.

APPLICATION IN CHAPTER 8:

Isaac rejects claims as anticipated by OGQ patent (1725). Athelia overcomes using All Elements rule:

Claimed Element (c): Attorney bond enabling protocol transfer

OGQ Patent: Claim 3 EXPLICITLY EXCLUDES ("requires no

attorney or bonded partner")

Result: Element MISSING

Claimed Element (d): Physical manifestation of bond (wolf ears)

OGQ Patent: NOT DISCLOSED

Result: Element MISSING

Claimed Element (e): Office Action/Response prosecution process

OGQ Patent: Claim 4 excludes ("no appeal or response")

Result: Element MISSING

OGQ patent lacks THREE claimed elements. Under All Elements rule, prior art fails to anticipate. Additionally, OGQ Claim 3 teaches AWAY by explicitly excluding the attorney bond element.

STATUTORY INDEX

35 U.S.C. § 101 - Utility (specific, substantial, credible)

35 U.S.C. § 102 - Novelty and anticipation

35 U.S.C. § 102(b)(2)(C) -Common ownership exception

35 U.S.C. § 103 - Obviousness

35 U.S.C. § 112(a) - Written description, enablement, best mode

35 U.S.C. § 121 - Divisional applications safe harbor

35 U.S.C. § 282 - Best mode not defense to validity (post-AIA)

37 CFR § 11.106 - Practitioner conduct

Graham v. John Deere (1966) -Four-factor obviousness test

In re Wands (1988) - Eightfactor enablement test

In re Bond (1990) - All Elements rule for anticipation

SUMMARY - PATENT LAW CONCEPTS TAUGHT

1. Graham Factors - Framework for § 103 Analysis

Graham v. John Deere Co., 383 U.S. 1 (1966) established four-factor framework for analyzing obviousness under 35 U.S.C. § 103: (1) Scope and content of prior art - what was known in the field before filing date; (2) Differences between prior art and claimed invention - specific limitations distinguishing claims from references; (3) Level of ordinary skill in the art (PHOSITA) - education, experience, and knowledge of hypothetical skilled artisan; (4) Secondary considerations (objective indicia of non-obviousness) - real-world evidence bearing on obviousness question. All four factors must be considered; cannot decide obviousness based on primary references alone.

2. Combining Prior Art References

Pre-KSR: Teaching, Suggestion, Motivation (TSM) test required explicit teaching in references, suggestion in knowledge of skilled artisan, or market/design motivation to combine. Post-KSR v. Teleflex, 550 U.S. 398 (2007): More flexible approach - can use common sense, ordinary innovation, market forces, design incentives, obvious to try when finite alternatives exist. Examiner must still articulate reasoning with rational underpinning - cannot rely on conclusory statements. Hindsight bias problem: Must evaluate obviousness from perspective of PHOSITA at time of filing, not with knowledge of applicant's solution.

3. Secondary Considerations - Objective Indicia

Real-world evidence rebutting prima facie obviousness:

Commercial success - significant sales/market share of product embodying claimed invention. Long-felt but unresolved need - problem existed for years without solution until claimed invention. Failure of others - skilled artisans tried and failed to solve problem. Unexpected results - claimed invention achieves

results not predictable from prior art. Copying by competitors - others in industry copied invention rather than designing around. Licensing - others paid to license invention. Skepticism of experts - skilled artisans doubted invention would work. Secondary considerations carry substantial weight and can overcome strong prima facie obviousness case.

4. Teaching Away Doctrine

Prior art reference "teaches away" when it **criticizes**, **discourages**, **or discredits** the path that leads to claimed invention. In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992): Teaching away requires more than merely disclosing alternative approach or expressing preference - must actively discourage pursuing claimed solution. Teaching away negates motivation to combine references, rebutting prima facie obviousness. Distinguishes from references that are merely silent about claimed approach or neutral between alternatives.

5. Level of Ordinary Skill in the Art (PHOSITA)

"Person Having Ordinary Skill In The Art" is hypothetical skilled artisan from whose perspective obviousness is evaluated. Factors determining PHOSITA level: Educational background (degree level), work experience in field (years), types of problems encountered (routine vs. complex), rapidity of innovations (fast-moving vs. stable art), sophistication of technology (cutting-edge vs. mature). Higher PHOSITA skill level makes more combinations "obvious" - more knowledge and capability assumed. Lower PHOSITA skill level narrows range of obvious combinations. Critical to properly define PHOSITA as it shapes entire § 103 analysis.

6. Nexus Requirement for Secondary Considerations

Secondary considerations evidence must have **nexus** (connection) to claimed invention, not to unclaimed features. **Commercial success nexus:** Success must result from claimed features, not marketing, brand, or non-claimed product features. If product includes claimed invention plus many other features,

must show success derives from claimed elements specifically. Unexpected results nexus: Unexpected properties must flow from claimed combination/structure, not from known properties of individual elements. Establishing nexus often requires comparative evidence showing products without claimed features lack the success/results, while products with claimed features achieve them.

7. Obviousness-Type Double Patenting (OTDP)

Rejection preventing patentee from obtaining multiple patents on obvious variants of same invention, even when claims aren't identical (which would be statutory double patenting). OTDP applies to: Claims in continuing application that are obvious variants of claims in commonly-owned earlier patent. Terminal disclaimer overcomes OTDP by: (1) disclaiming terminal portion of later patent to expire with earlier patent, (2) requiring common ownership of both patents (ties enforcement together). OTDP prevents extending patent term by filing obvious variations in later applications while maintaining same priority date.

8. Post-KSR Obviousness Standards

KSR International v. Teleflex (2007) rejected rigid TSM test, establishing more flexible standards: Common sense combinations allowed when combining elements according to known methods yields predictable results. Obvious to try when finite number of identified, predictable solutions exist. Market forces and design incentives can supply motivation to combine. Ordinary innovation - routine engineering/scientific adaptations are obvious. However, examiner still must articulate reasoning beyond conclusory statements - "common sense" requires rational explanation rooted in prior art or knowledge in field. Secondary considerations remain critical for rebutting prima facie case.

DISCUSSION QUESTIONS

1. Commercial Success Nexus Problem

Question: Patent claims portable music player with (A) 10GB storage, (B) white earbuds, (C) click-wheel interface. Product achieves \$100M sales. Evidence shows: (1) Prior art disclosed 10GB storage, (2) White earbuds were marketing decision unrelated to claims, (3) Click-wheel was novel. Can applicant establish nexus between commercial success and claimed invention for § 103 secondary considerations?

Analysis Points: Nexus requires success attributable to claimed features, not unclaimed features or factors unrelated to claims. Here: (A) 10GB storage was known - no nexus; (B) White earbuds not claimed - irrelevant; (C) Click-wheel is only claimed feature not in prior art. Must show sales success resulted from click-wheel specifically. If consumer surveys, reviews, or market analysis show click-wheel drove purchasing decisions, nexus established. If success came from brand (Apple), design (aesthetics), marketing (ads), or unclaimed features, no nexus. Often need comparative evidence: products with click-wheel succeeded, products without failed. Weak nexus here unless strong evidence click-wheel was driver.

2. PHOSITA Definition Impact

Question: Patent application in pharmaceutical chemistry field. If PHOSITA defined as "PhD organic chemist with 10 years drug development experience" vs. "Bachelor's degree chemist with 2 years experience," how does this affect obviousness analysis of combining two drug compounds to achieve synergistic effect?

Analysis Points: PhD with 10 years: Higher skill level means greater knowledge of chemistry, drug interactions, structure-activity relationships, and prior art. More likely to recognize potential synergy and be motivated to combine compounds. Broader range of combinations would be "obvious" to this PHOSITA. Bachelor's with 2 years: Lower skill level means less knowledge, narrower expertise, less experience predicting drug

interactions. Many combinations that seem "obvious" to PhD would be non-obvious to this PHOSITA. Critical to accurately define PHOSITA based on actual field - not hypothetical genius or complete novice. Evidence: industry hiring standards, expert testimony, academic requirements for researchers in field. Higher PHOSITA = more combinations obvious = harder to get patent. Lower PHOSITA = fewer combinations obvious = easier to patent.

3. KSR "Common Sense" Limits

Question: After KSR v. Teleflex, examiner rejects claims as obvious, stating: "It would have been common sense to combine Reference A and Reference B." References are from completely different fields (Reference A = automotive braking; Reference B = computer networking). Can examiner rely solely on "common sense" without further explanation?

Analysis Points: NO. KSR allows common sense reasoning but requires rational underpinning with articulated reasoning. "Common sense" cannot be conclusory label - must explain why PHOSITA would have been motivated to combine references from different fields. Examiner must identify: (1) common problem both references address, (2) analogous art relationship (even if different fields, are they directed to same purpose?), (3) teaching in references suggesting combination, or (4) known principle applicable across fields. Cross-field combinations need stronger justification than intra-field. Proper response: Challenge examiner to articulate specific reasoning beyond "common sense" label. Argue references are non-analogous art, not directed to same problem, and PHOSITA would have no reason to consult networking reference when solving braking problem. KSR expanded flexibility but didn't eliminate requirement for reasoned analysis.

4. Teaching Away vs. Alternative Approaches

Question: Reference A discloses medical device with three possible attachment mechanisms: screws (described as "preferred embodiment"), clips, or adhesive. Examiner combines

Reference A (using clips) with Reference B to reject claims. Applicant argues Reference A "teaches away" from clips by preferring screws. Does this argument succeed under In re Oetiker?

Analysis Points: NO. Under Oetiker, teaching away requires more than expressing preference for alternative or disclosing multiple options. Reference A affirmatively discloses clips as viable option - doesn't criticize, discourage, or discredit clip attachment. Calling screws "preferred" doesn't teach away from clips - merely indicates ranking of alternatives, all of which are disclosed as workable. Successful teaching-away argument would require: Reference A states "clips should be avoided due to mechanical failure risk" or "adhesive is unsuitable for medical applications" or "other attachment methods are inferior and unreliable." Disclosure of multiple options with preference = not teaching away. Active discouragement/criticism of claimed approach = teaching away.

5. Unexpected Results Evidence

Question: Patent claims pharmaceutical formulation combining Drug X + Drug Y. Applicant submits evidence: (1) Drug X alone reduces symptom by 30%, (2) Drug Y alone reduces symptom by 30%, (3) Drug X + Drug Y together reduce symptom by 80% (not merely additive 60%, but 80% synergistic effect), (4) Combination also costs 5x more to manufacture than either drug alone. Does unexpected results evidence overcome § 103 obviousness?

Analysis Points: Likely YES. Synergistic effect (80% vs. expected 60%) is unexpected result showing more than predictable combination. Manufacturing cost is irrelevant to patentability - § 103 asks only whether invention would have been obvious, not whether it's commercially viable or cost-effective. Key factors: (1) Results were unexpected - exceeded predictions from prior art, (2) Results have nexus to claimed combination - synergy flows from X+Y interaction, not unrelated factors, (3) Results are superior - 80% reduction is significant improvement. Proper analysis: Prior art taught 30% reduction from each drug individually. PHOSITA might try combining them expecting

additive effect (60%), but 80% synergistic result was not predictable from teachings. This unexpected superiority is strong secondary consideration evidence. However, must also address whether prior art suggested trying combination in first place - if references taught against combining, or if combination was unknown/untried approach, unexpected results add to non-obviousness case.

CASE STUDY: In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litigation

Federal Circuit, 2012 - 676 F.3d 1063

Facts

Patent covered once-daily extended-release formulation of cyclobenzaprine (muscle relaxant drug). Prior art disclosed immediate-release cyclobenzaprine requiring multiple daily doses (twice-daily or three-times-daily). District court held patent invalid as obvious under § 103, reasoning that converting immediate-release to extended-release formulation was routine pharmaceutical practice - obvious to try with predictable results.

Procedural Posture

Generic drug manufacturers (Anchen, Mylan, others) filed Abbreviated New Drug Applications (ANDAs) seeking to market generic extended-release cyclobenzaprine before patent expiration. Patent holder (Eurand) sued for infringement under Hatch-Waxman Act. Defense: Patent invalid as obvious. District court agreed - granted summary judgment of obviousness invalidity. Eurand appealed to Federal Circuit.

Legal Issue

Are strong secondary considerations (commercial success, unexpected clinical benefits, long-felt need) sufficient to overcome prima facie obviousness when prior art suggests combination and result seems predictable from known pharmaceutical principles?

Federal Circuit Holding

REVERSED. Federal Circuit held secondary considerations evidence created genuine dispute of material fact precluding summary judgment. While prima facie case of obviousness existed (known drug + known extended-release technique = predictable result), secondary considerations were so strong they could tip balance toward non-obviousness.

Secondary Considerations Evidence

Commercial Success: Over \$400 million in sales of product embodying patented formulation (Amrix brand). Significant market share in muscle relaxant category.

Long-Felt Need: Cyclobenzaprine had been on market since 1977 in immediate-release form requiring multiple daily doses. For decades, no once-daily formulation developed despite obvious patient compliance benefits.

Unexpected Results: Once-daily formulation achieved therapeutic effect equivalent to three-times-daily dosing with improved safety profile (reduced sedation, fewer side effects). Clinical trial data showed benefits not predictable from prior art.

Court emphasized: "When secondary considerations are present, though they are not always dispositive, they must be considered as part of all the evidence in making the obviousness determination." Secondary considerations are not just tie-breakers - they can outweigh strong prima facie case.

Nexus Requirement Satisfied

Court found sufficient nexus between commercial success and claimed invention. Sales were of product embodying patented

formulation - not driven by marketing, brand alone, or unclaimed features. Unexpected clinical results (improved efficacy and safety) flowed directly from claimed extended-release design. Long-felt need addressed specifically by claimed once-daily formulation innovation.

Significance for Patent Prosecution and Litigation

For Prosecution: When responding to § 103 obviousness rejections, do not concede defeat if prima facie case seems strong. Gather and submit secondary considerations evidence: sales data, market studies, licensing agreements, expert testimony about long-felt need, clinical results showing unexpected benefits. Even "routine" combinations can be non-obvious if secondary considerations are compelling.

For Litigation: Secondary considerations can defeat summary judgment of obviousness even in pharmaceutical cases where "obvious to try" arguments are common. Federal Circuit takes secondary considerations seriously - they are not mere afterthought but core part of Graham analysis.

Connection to Chapter 8

In Chapter 8, Athelia faces § 103 obviousness rejection and must marshal secondary considerations evidence to overcome it. Alexander teaches her to present: (1) commercial success of Guardian Queen examination system, (2) long-felt need for examiner-applicant bond structure, (3) unexpected results from claimed configuration, (4) failure of 47 prior candidates to achieve same bonding. The Cyclobenzaprine case demonstrates this strategy is not just narrative device - it's real Federal Circuit doctrine that wins cases. Understanding how to identify, develop, and present secondary considerations is essential Patent Bar skill.

USPTO Exam Tip: Fact patterns testing § 103 will often include secondary considerations evidence. Even when combination seems "obvious to try," strong commercial success + long-felt need + unexpected results can overcome rejection. Must evaluate ALL Graham factors, not just primary references.

COMPLETE STATUTORY TEXT

35 U.S.C. § 103 - Conditions for Patentability; Non-Obvious Subject Matter

- (a) In General. A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.
- (b) Exceptions. -
- (1) Inventions Made Abroad. [Repealed by AIA]
- (2) Biotechnological Processes. A claimed invention that is a biotechnological process using or resulting in a composition of matter that is novel under section 102 and nonobvious under subsection (a) shall be considered nonobvious if: (A) claims to the process and the composition of matter are owned by the same person or subject to an obligation of assignment to the same person.
- (3) Joint Research Agreements. Subject matter developed by another person, which qualifies as prior art only under one or more of subsections 102(a)(2), shall not preclude patentability under this section where the subject matter and claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Graham v. John Deere Co., 383 U.S. 1 (1966) - Four Factors

Supreme Court's Framework for § 103 Analysis:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

Four Graham Factors (mandatory consideration):

- 1. Scope and content of the prior art What was known in the field before the invention
- 2. Differences between prior art and claimed invention Specific limitations not disclosed
- 3. Level of ordinary skill in the art Capabilities of hypothetical PHOSITA
- 4. Secondary considerations (objective indicia) Realworld evidence of non-obviousness

All factors must be considered in every § 103 analysis. Secondary considerations are not optional afterthought they are integral part of inquiry.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007) - Post-KSR Standards

Supreme Court's Rejection of Rigid TSM Test:

The Court held that the Federal Circuit's rigid application of "teaching, suggestion, or motivation" (TSM) test was incompatible with Supreme Court precedent. § 103 forbids issuance of patent when "differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious." The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.

Flexible Approach Factors:

- **Predictable results:** Combining prior art elements yielding expected result = obvious
- Common sense: Can use ordinary innovation and common sense of PHOSITA
- Obvious to try: When finite number of identified, predictable solutions exist, trying each is obvious
- Market forces: Design incentives and market pressures can motivate combinations

Important Limitation: Examiner must still articulate reasoning with rational underpinning. "Common sense" and "obvious to try" are not talismanic phrases - require specific explanation based on prior art and knowledge in field. Hindsight bias remains prohibited.

MPEP § 2141 - Scope and Content of Prior Art (Graham Factor 1)

In determining the scope and content of the prior art, the examiner must consider:

- Analogous art: Prior art is analogous if from same field of endeavor OR reasonably pertinent to problem invention attempts to solve
- References available to PHOSITA: Knowledge that would have been available to skilled artisan at time of filing
- Level of detail in prior art: Whether references enable making/using disclosed invention
- Combined teachings: Multiple references can be combined if PHOSITA would have been motivated to do so

MPEP § 2143 - Graham Factors - Differences Between Prior Art and Claimed Invention

After determining scope and content of prior art, examiner must identify specific differences between prior art and

claimed invention. These differences form basis of obviousness analysis. Examiner must explain how references teach or suggest each claimed limitation, and why PHOSITA would have been motivated to combine teachings.

MPEP § 2145 - Secondary Considerations (Objective Indicia)

Evidence of Non-Obviousness: Secondary considerations (objective indicia) are factual inquiries that guard against hindsight bias. When present, they must be considered as part of obviousness determination. Types of secondary considerations evidence:

- Commercial success: Significant sales/market share - requires nexus to claimed features
- Long-felt but unsolved need: Problem existed for substantial time without solution
- Failure of others: Skilled artisans tried and failed to solve problem
- Unexpected results: Invention achieves results not predictable from prior art
- Copying by competitors: Others copied invention rather than design around
- Licensing: Others paid to license the invention
- **Skepticism of experts:** Skilled artisans doubted invention would work
- **Praise by others in field**: Recognition by skilled artisans of advance

Nexus Requirement: Secondary considerations must have nexus (connection) to claimed invention, not to unclaimed features or external factors.

STATUTORY REFERENCE INDEX - Chapter

- 35 U.S.C. § 103 Non-obvious subject matter requirement
- MPEP § 2141 Scope and content of prior art (Graham Factor 1)
- MPEP § 2143 Differences between prior art and claims (Graham Factor 2)
- MPEP § 2144 Level of ordinary skill in the art (Graham Factor 3)
- MPEP § 2145 Secondary considerations (Graham Factor 4)
- Case Law: Graham v. John Deere, 383 U.S. 1 (1966) -Foundational § 103 framework
- Case Law: KSR Int'l v. Teleflex, 550 U.S. 398 (2007) -Flexible obviousness analysis
- Case Law: In re Cyclobenzaprine, 676 F.3d 1063 (Fed. Cir. 2012) - Secondary considerations overcome prima facie obviousness
- Case Law: In re Oetiker, 977 F.2d 1443 (Fed. Cir. 1992) -Teaching away doctrine