

Question 1:

Memo to Holder

I. §101 Subject Matter

The '123 patent is not invalid for improper Subject Matter. Essentially everything is patentable so long as the "invention" to be patented is not a pure mathematical formula, law of nature, or natural phenomenon and wouldn't preempt all uses of the formula/principle, Chakrabarty; Diamond; Bilski. Because Holder's device is not merely a concept (electricity is hot), but rather an application of it in the form of a product (controlled heat + absorbency), it is patentable subject matter.

II. § 112 Requirements

A. Utility

To be "Useful" the invention must fulfill three requirements. First, it must be operable/work (not be "inherently unbelievable"). Branan. Second (debatably), it may need to be beneficial, i.e. not be frivolous, injurious, or immoral. Lowell. Third, it must have "specific and substantial" utility that provides a "well-defined" and "presently available" benefit to the public. Fisher. The functionality of the '123 patent is not in doubt, it is not deceptive/immoral/injurious (so long as it still doesn't shock people!), and it provides a public benefit by helping bathers get dry and stay warm.

B. Enablement

An invention is not enabled if, at the time of filing, a PHOSITA would have to engage in undue experimentation to make and use the claimed invention. Gentry/Amgen/Strahilevitz. Enablement is assessed claim-by-claim, but may be "read" in light of the Specification and a PHOSITA's knowledge and determined at the time of filing. In Claim 1, Holder provides no explanation of how the electric wire is run "through the fabric" except that, in the Specification,

she alludes to a procedure similar to use in electric blankets. Holder also does not explicitly detail any means of bundling the wires into a cord that connects to the 110V electric plug listed in the Specification. Instead, Holder merely states that it must be connected to a “sufficient” electrical source. Nonetheless, an electric blanket/towel-making PHOSITA would probably have enough technical experience and ingenuity to implement both of these elements when an unskilled practitioner can do so “off and on” in less than one year. Unamended Claim 1’s “fabric” is vaguer than “absorbent fabric,” but it is likely sufficient to enable a PHOSITA to construct a heated and shock-resistant *towel*.

So long as Claim 1 is sufficiently enabled, the dependent Claim 2 is also likely enabled. Although it still leaves some experimentation up to the PHOSITA to determine the appropriate thickness and material of the “absorbent fabric” as well as the method of reducing shock via the wires, such experimentation should not be “undue” for a PHOSITA.

C. **Written Description**

Written Description focuses on “teaching” to show possession (actual invention). Here, Holder has shown possession and provided rudimentary details sufficient to meet the §112 Written Description standard. Additionally, her amendment to the *claims* (and not description) is permissible under §132’s No New Matter rule.

Notably, however, Holder did not claim her absorbent AND shock-resisting material; she only claimed a shock-resisting *wire/fabric* combination as part of the electric towel. This would likely function as a disclaimer of the absorbent/shock-resisting *material*.

D. **Definiteness**

Claims are indefinite whenever they are “insolubly ambiguous” when read in light of the Specification. Othokinetics. Claim 1 of the ‘123 has a minor Definiteness-Antecedent problem because “the fabric” in Claim 1(b) should probably be written as “*said absorbent fabric*” and

“the towel of Claim 1” should probably refer to “said *electric* towel.” However, because there is only one fabric element in Claim 1, and there is only one towel in Claim 1, a court can construe each without difficulty. Energizer. Claim 2, which refers to “the towel of claim 1,” is bit more problematic because it could be referring to the absorbent material comprising the towel or the entire electric towel structure. Even so, it could easily be construed to refer to all elements in Claim 1 and therefore would not be *insolubly* ambiguous.

E. **Best Mode**

Best Mode requires Holder to show that (1) she (subjectively) had no Best Mode in mind when she filed her patent application, and (2) (objectively) she didn’t conceal a Best Mode, making the disclosure sufficient for a PHOSITA to practice it without undue experimentation. Chemcast. The goal is to punish deliberate concealment and facilitate the disclosure of knowledge to the public. Here, Holder provides instructions regarding the voltage limits but fails to describe the optimal “absorbent fabric” in Claim 1 or the “sufficiently shock resistant” wire/fabric combination in Claim 2. Holder worked on and off from 1/8/2000 to 12/20/2000 to develop an improved absorbency fabric specifically because of the continued electric shocks. Because she spent almost a year finding this optimum fabric, yet failed to describe it, she likely fails the subjective element of Best Mode. It is unclear whether this omission was inadequate for a PHOSITA, however, who may have access to more types/thicknesses of absorbent fabrics as well as other methods to avoid shock (such as BTC’s GFCI plug).

III. **§102 Novelty/Statutory Bars**

A. **Reduction Dates**

“Invention” may be shown by Conception with corroborated diligence, reduction to practice (“RTP”), constructive RTP via filing, and/or Rule 131 “Swearing Behind.” Holder conceived of and made a first attempt 1/1/2000 then worked diligently until 1/8/2000 when she

produced a wire/terry version. This is her earliest-possible RTP date (though then she faces Abandonment problems). Conversely, Holder could argue that her work from 1/8/2000-12/20/2000 was experimental and pre-RTP because her 1/8/2000 prototype was the work of an unskilled inventor, constructed without belief it would be operable, and with ongoing problems (electric shocks!). Because her invention wasn't fully operable until her 12/20/2000 invention of the absorbent/shock-resistant fabric (Claims 1 and 2), it seems likely her work was more than "fine-tuning" and therefore her RTP date was later.

To claim the 12/20/2000 RTP date, however, Holder must show unbroken Diligence from pre-conception to RTP, something difficult in light of her "on and off" work. Such diligence must also be corroborated either by her family or her authenticated lab notebooks (if any). Without evidence of poverty, illness, or the demands of other employment, she might fail even the more lax standard afforded a nonprofessional, at-home inventor.

In either case, Holder was likely the first to conceive but second to RTP. BTC's unknown conception date collapses with its RTP date, Barbacid, either of which (1/7/2000 prototype or 6/30/2000 sale) would be before Holder's likely 12/20/2000 RTP, and the first of which would predate her 1/8/2000 RTP. If Holder fails to show Diligence until her RTP, Priority would go to BTC because it was the first to reduce.

B. Prior Art Applicability

The relevant Prior Art for purposes of §102 Anticipation would include *any* references in *any* art, whether pertinent to the field of electric-blanket-makers or not. Schreiber. Other than superficial differences, "each and every" element of the claimed invention, either explicitly or inherently, must appear in the Prior Art reference. Robertson.

C. §102a: Known/Used

Holder's '123 patent can be barred under Anticipation if the same invention (all elements) was known or used by others in the United States before the date of Holder's *invention*. The German material was unlikely to have been known or used by others in the U.S. because it was not yet published. BTC's electric towel was *used* by others in the U.S. as of the 6/30/2000 shipment; if Holder's invention date is 12/20/2000, BTC's towel is prior art. If Holder invented 12/20/2000, BTC's towel may also qualify as being *known* by others in the U.S. because of its 1/9/2000 website ad, although this may fail because the ad was for a then-sham product. The BTC towel only Anticipates of it meets all elements of Holder's 2 claims; it certainly meets Claim 1, but likely fails to Anticipate Claim 2 because it functions by means of a GFCI plug, not based on a special "wire/fabric" combination that prevents shocks.

Holder's family's use of his prototype towel will not constitute "public use" prior to Holder's invention date. If Holder RTP on 1/8/2000, the "public" use would be *after* her invention; if she RTP on 12/20/2000, it wasn't yet an invention. Furthermore, Holder can likely argue that the use was not "public" because it was in her home, with her continued control, possibly in a private area (master bathroom), possibly for the purposes of assessing its operability, and likely without public knowledge. City of Elizabeth/Moleculon.

The pre-existing electric blanket was used before Holder's invention, making it prior art, but is likewise doesn't encompass all of Holder's elements in both claims.

D. §102a: Printed/Patented

Holder's '123 could be invalidated for Anticipation only if claims to the same (all elements) invention were printed or patented anywhere before the date of Holder's invention. The German patent was published ("printed") on 12/1/2000 (and likely publicly accessible). This could constitute prior art for the Claim 1(a) "absorbent fabric," but will not Anticipate Claim 1

because the German patent application mentions nothing about use in an electric towel. Because it (apparently) does not include wires, the German application cannot Anticipate Claim 2's "wire/fabric combination."

E. §102b: Patented/Described Statutory Bar

Holder's '123 patent could also be invalidated for Anticipation if the same claims were included in a patent or printed publication anywhere at least 1 year before the Critical Date, i.e., the date that Holder *filed* her patent application. Holder filed on 1/10/2001, making her §102b Critical Date 1/10/2000. All elements of Holder's claims were not included in any patent issued by 1/10/2000. BTC's 1/9/2000 website ad *may* qualify here as a "description" of the same invention, however this is uncertain because the ad merely mentions a "heated towel" and shows a (doctored) photo implying it will be plugged into an outlet. The picture and description may be enough to meet the All Elements Test as applied to Claim 1: absorbent fabric and a connecting wire, and (perhaps by implication) wire running through the towel. It seems unlikely it could meet All Elements of Claim 2 because neither the picture nor description addresses that the wire/fabric combination is the means by which shocks are avoided.

F. §102b: Public Use/On Sale Statutory Bar

Holder's '123 patent could also be invalidated for Anticipation if, by her 1/10/2000 Critical Date, she or another she or another used publicly or put on sale an invention with all the elements of her claims. Holder's family's bathroom use of her prototype may qualify as a "public use," even though others did not see it. Egbert. Whether it qualifies likely depends on the Baxter factors: she was likely still developing/testing her prototype and few people were using it, but conversely her family may not have been under any duty of confidentiality. Because it was still within her control and she continued to work on it (on and off) it probably doesn't qualify as a Public Use. Moleculon.

Assuming BTC's product embodies all of Holder's elements in both claims (see above), BTC's 1/9/2000 website ad is still unlikely to constitute a public sale prior to Holder's 1/10/2000 Critical Date. First, despite listing a price, the website seems more like circulating an ad or distributing a quote sheet, Gemmy/Linear Tech, particularly because the website asked users to submit their emails (presumably to learn when they could acquire the product). Second, the device shown was merely a towel and a cut-off electric cord, and as demonstrated by BTC's continued problems, it wasn't "ready for patenting."

G. §102c: Abandonment

Because Holder didn't expressly abandon her invention nor did she attempt to exploit it as a trade secret, she did not Anticipate herself under §102c.

H. §102d: Inventor's Foreign Patent

Because Holder did not patent her invention in a foreign country at all she did not Anticipate herself under §102d.

I. §102e: English Patenting or Publishing

No possible prior art qualifies under §102e. To qualify, the all elements of the invention must be included in the English-language claims or description of a patent or published application, either in the U.S. or a PCT country; if so, such disclosure is backdated to the time of filing for the patent. The only patents applied-for, published, or issued are the German patent and Holder's. The German patent fails for (presumably) not being printed in English, and Holder's does not qualify because it is was not filed "by another."

J. 102f: Derivation

Holder's '123 patent faces a minor Derivation problem under §102f. An invention is non-novel when the inventor did not herself invent the subject matter to be patented. Under Agawam, an issued patent can only be defeated under §102f if the prior disclosure embraces

the plan of improvement and sufficiently enables a PHOSITA. As alluded to in Holder's Specification and as shown by the Examiner's initial rejection, the concept of a heated towel was inspired by the electric blanket. The electric blanket cannot Anticipate Holder's invention, however, because it doesn't meet All Elements of Holder's amended claims. It is not made of an absorbent material, so it does not anticipate Claim 1. It may be made of a "sufficiently shock-resistant" wire/fabric material, but because Holder's Claim 2 is dependent on Claim 1 ("the towel of Claim 1"), the electric blanket probably would not Anticipate Claim 2 either. Because the electric blanket doesn't meet all elements of both of Holder's claims, the '123 patent is not invalid for Derivation.

K. §102(g)(1) Interference

Section 102g1 does not apply because this is an infringement action, not an Interference as required by the statute.

L. §102(g)(2) Priority

BTC's invention may fulfill §102g2 because it was made in the U.S. without abandonment/suppression/concealment. Assuming Holder was the first to conceive but the second to RTP, the court must consider her Diligence (see III.A., above). Because she worked "on and off," her Diligence may be deemed insufficient. The issue then would be what dates constitute full RTP: If BTC's 1/7/2000 prototype is a RTP, despite the shocking problems, then it would constitute Prior Art for Holder (no matter what her RTP date). If BTC's 6/30/2000 sales constituted its RTP date, BTC's invention would be prior art only if Holder's RTP date was 12/20/2000. Because both inventors experienced "shocking" problems, a court would likely find that both reduced at the earlier dates or both reduced on the later dates. However, because the BTC invention does not encompass all elements of both of Holder's Claims (see above), Holder's patent is not invalid for Anticipation.

IV. §103 Validity: Obviousness

A. Pertinent Prior Art

Generally, §102 Prior Art qualifies as §103 Prior Art. The inventor is generally presumed to be aware of all prior art references because they are “hanging on the walls of her shop.” Winslow. Unlike Anticipation, however, §103 Obviousness analysis only “*pertinent*” Prior Art references in *analogous* arts, as determined by their relevance to a hypothetical PHOSTIA (not what was deemed relevant by the actual inventor). Winslow. Prior Art is pertinent if it is in the same field of endeavor (electrically-warmed or –resistant fabrics and devices), regardless of the problem addressed, or if it is in a different field but still pertinent to the issue being addressed. Cook Chemical.

B. §103 Obviousness

To be found Obvious under the Graham Test, one must (1) identify the pertinent prior art, (2) ascertain the differences between it and the claims at issue, (3) consider the level of the PHOSITA, (4) determine the obviousness/nonobviousness of the subject matter, and *maybe* (5) (under KSR) consider relevant secondary factors. A device can be found Obvious so long as each necessary element is included in a Prior Art reference (and possibly within the PHOSITA’s experience and common sense).

The *possible* prior art and competing products are listed graphically below:

	Electric Blanket	German Material	BTC	Holder
Individual Materials	Fabric	Absorbent + shock-resistant fabric	Absorbent fabric	Absorbent fabric (Claim 1)
	—	—	—	
	Embedded wire	—	Embedded wire	Embedded wire (Claim 1)
	Standard cord/plug	—	GFCI plug (similar to prior art)	Standard cord/plug (Claim 1 + Spec)
Overall Use	(Body) Warmth	—	(Foot) Warmth	(Foot) Warmth (Spec)
	—	Absorbency	Absorbency	Absorbency (Claim 1 + Spec)
	—	Resisting shock (via material)	Resisting shock (via plug)	Resisting Shock (via material) (Claim 2 + Spec)

As explained above, the electric blanket is §102a prior art. The German material qualifies as §102a prior art, and BTC's invention qualifies as §102g2 Prior Art, so long as Holder's RTP date is 12/20/2000. All three of these are §103 pertinent (same field/problems).

Assuming all these pieces of Prior Art are admissible, Holder's invention is Obvious because of similar design features and purposes. The German material provides the absorbent and shock-resisting fabric, the BTC invention and the electric blanket have embedded wire, the electric blanket uses a similar cord/plug, and the electric blanket and BTC towel are used for warmth. None of the KSR secondary factors seem to undermine this finding.

Question 2

Memo to BTC

Holder is likely to accuse BTC of literal infringement, particularly under the Doctrine of Equivalents, as well as indirect infringement under §271. BTC's best defenses are to invoke Prosecution History Estoppel and Inequitable Conduct against Holder. Additionally, BTC may be able to argue invalidity of Holder's claims due to Obviousness and her lack of unbroken diligence (see attached memo).

I. Infringement

A. Literal

To determine if BTC's products literally infringe, the court will construct Holder's claims as a matter of law, beginning with the literal claim language and PHOSITA-understanding, then (if unclear) considering the Specification and Claim 2's Preamble, then moving on to prosecution history and disclaimers, then if necessary considering extrinsic evidence such as dictionaries, experts, and Holder herself. Phillips/Markman. Once differentiated and construed, those two claims will be compared to BTC's accused product, The Electric Towel; this is a question of fact for the jury.

Holder's Claim 1 elements includes an absorbent fabric and an electric wire running through it and connected to an electric outlet; in light of the Specification, that connection is a 110V electric plug. Compared to Claim 1, BTC's Electric Towel literally meets each of these three elements. However, because Holder's claim will likely be limited by her Specification of a 110V plug, BTC can argue that its electric means are different and therefore noninfringing. Holder can respond BTC's means are "equivalent" because the GFCI plug also functions to connect the towel to the outlet, however BTC can successfully argue that it provides a different function (disconnection when shock is likely) by a different means, even if it produces a similar result (no

shock), and therefore fails the Winans Function, Way, Result Test and fails under the Doctrine of Equivalents.

Holder's Claim 2 additionally claims a wire/fabric combination that is sufficiently shock-resistant to avoid electrical shock. BTC's towel is also sufficiently shock-resistant, although BTC employs a specialized plug, not wiring, to accomplish this. Holder may argue that the GFCI plug substitutes for BTC's lack of a shock-resistant material, but BTC is unlikely to be found to literally infringe because the plug performs a different function in a different way from a fabric/wire material that resists shocks, even if it does produce the same result.

BTC may be able to counter both of these allegations because of Holder's possible Prosecution History Estoppel ("PHE"). PHE arises when a §112 amendment made to secure the patent also narrows the patent's scope, even if made only to improve the description. Festo. Unless the claimed equivalent is "unforeseeable" or "tangential" to the amendment, the result is that the Doctrine of Equivalents does not apply. Festo.

Here, at the request of the Examiner and to save her application from rejection, Holder amended and limited both claims to avoid the electric blanket prior art. She clarified that the Claim 1 fabric must be "absorbent" and that the Claim 2 fabric be a "wire/fabric combination." This constitutes a §112 limiting amendment made to secure the patent. No exception is applicable because BTC's product did not use unforeseeable elements and because Holder's amendment is central, not tangential, to alleged equivalents and the BTC device. Furthermore, Holder herself must bear the burden to avoid PHE. BTC is likely to succeed here, meaning that the Doctrine of Equivalents will not apply and its towel will be held noninfringing.

B. §271 Indirect

At the time of BTC's first sales, BTC had no knowledge of Holder's invention. Since that time, BTC has never seen another electric towel marked with Holder's patent number, nor (until

this lawsuit) has Holder notified BTC that its actions are infringing. Without that knowledge, BTC cannot be found to have the specific intent required to actively and knowingly induce infringement under §271(b).

Similarly, Holder is unlikely to prevail under §271(c). Section 271 there be a direct infringer, a BTC sale of an infringing component, and BTC knowledge of both Holder's patent and the infringing sale (though *not* that the sale *was* infringing). BTC's product is substantially similar and capable of only the same use as Holder's. BTC may be able to circumvent the statutory language by arguing that it sold a similar device, not a material part used *with* Holder's device. Additionally, BTC lacked actual knowledge of Holder's patent (via marking or notification), making it unaware of Holder's patent and therefore not liable as a contributory infringer.

Finally, under both subsections, there seems to be no direct infringer, making BTC not contributorily liable.

II. Inequitable Conduct Defense

If BTC can bear the burden of proof by clear and convincing evidence, BTC may be able to prove that Holder engaged in Inequitable Conduct before the PTO. If successful, this would invalidate all of Holder's claims (and grant BTC's attorneys' fees).

PTO's Rule 56 imposes a duty of candor and good faith on those practicing before it. The standard is a sliding scale of materiality and intent. JP Stevens. Material info is any information that the examiner might have considered *important*—even if not dispositive—in deciding whether to grant Holder's patent. Intent can be shown either by explicit intent to deceive or by inferring the natural results of one's actions.

Here, Holder did not submit or describe any prior art references, *despite* using the electric blanket as a model and *despite* mentioning it in her Specification. Holder's specification

specifically mentions construction “similar to” an electric blanket, and she also uses a standard 110V electric plug. Additionally, the German patent was published in Germany before the date she filed and possibly before she RTP. These are all likely prior art relevant to Holder’s Novelty/Anticipation and Obviousness.

On the other hand, Holder likely had little intent to deceive. She drafted her own Specification and original Claims, and almost certainly lacked access to sophisticated sources providing the German patent application. Problematically, if Holder has 0% intent, the degree of materiality is completely irrelevant. Kingsdown. It is likely that she didn’t purposely intend to mislead the PTO, but her failure to disclose the electric blanket on which she based her invention demonstrates a recklessness that can imply intent. Then, Holder’s only defense could be that the Examiner *was* constructively informed due to her notation of the electric blanket in the Specification, something likely true because the Examiner rejected her original claims due to non-novelty because of it, thereby minimizing Materiality. She can’t defend against the other pieces of prior art.

Question 3

Permanent Injunction

The court may impose a permanent injunction if (1) there is a risk of irreparable harm, (2) hardships weigh in favor of Holder, (3) the public interest is not damaged, and (4) the remedies at law are inadequate. eBay.

Holder is not faced with irreparable harm because BTC's infringing towel can be licensed, thus guaranteeing Holder some dividends. If an injunction were granted, BTC would face more serious hardships: BTC's commercially successful product has netted \$500,000, so granting an injunction could destroy its business. Granting an injunction would also harm the public because it would remove BTC's useful and successful product from the public domain for the remaining length of Holder's patent, meaning that an electric towel could no longer be purchased unless/until Holder were successful in marketing her similar product (something she has not accomplished to date). In light of these factors, it is unlikely that the remedies at law are inadequate to protect Holder's unexploited patent. The court should therefore NOT issue a permanent injunction.

Lost Profits

To prove Lost Profits, Holder must show (1) demand for her product, (2) the amount of profit she would have made, (3) the absence of substitutes, and (4) her capability to sell. Panduit.

Holder has never sold a towel, therefore she cannot show any explicit demand for *her* product. She can, however, argue that if BTC's towel had never been introduced to the market, Holder could have found commercial production means and many of BTC's purchasers would

have chosen her similar towel. That estimate would provide an approximation of the amount of profit she would have made (less the possible difference in price if she had charged more and yet retained that number of sales). These are difficult and somewhat arbitrary measurements because it is impossible to know (a) if Holder could have contracted/licensed to manufacture her towel, (b) a market-successful price for her towel, and (c) how many sales she could have achieved at that price and in light of possible advertising/marketing. Additionally, the market has other substitutes (BTC's towel and even thick towels warmed in the dryer). Finally, Holder's failure to sell a single model and her lack of manufacturing facilities don't demonstrate her capability to sell.

Holder is unlikely to be able to convincingly prove these four elements, therefore the court should NOT award Lost Profits.