

1.

Subject Matter – 101

Whether the invention is of the proper subject matter for patent comes under 101, which allows patents for any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. The Court has only limited this statement to say it must be made by man, and cannot be a discovery, law of nature, physical phenomenon, or abstract idea. *Chakrabarty; Bilski*. The '123 patent describes a machine, made by man in the zippered headphones, and does not rely on an abstract idea, or law of nature in its inventive process.

Utility – 101 & 112

Utility has three requirements. First, the invention is operable and non-fanciful to the person skilled in the art (herein, "PHOSITA"). *Newman*. Second, it is beneficial, meaning non-injurious or immoral. *Juicy Whip*. Finally, that it be practical, containing both specific and substantial utility. *Brenner; Brana*.

Utility is met here. To the PHOSITA, who should be an ordinary mechanic with electrical wire experience, the use of a molded zippering system to keep cables untied would not seem fanciful or impossible; evidence showing that PHOSITA would reasonably doubt that utility does not seem to exist. Second, it clearly has beneficial utility that is nor injurious or immoral, as it zips wires instead of, e.g., destroying the world. Finally, its utility is specific and substantial; the device is not so vague as to be meaningless and provides a particular benefit to the public, which any person who has tangled a pair of headphones in his pockets can tell you prevent the frustration of untangling the cords.

-Enablement

Enablement requirement an invention is described in such full, clear, concise, and exact terms as to enable [a PHOSITA] to which it pertains, to make and use the same. Enablement comes down to whether, at the time of invention, undue experimentation would be required for the PHOSITA to make and use the invention. *Incandescent Lamp*. The Federal Circuit has also provided helpful factors: quantity of experimentation necessary; amount of direction or guidance presented; presence or absence of working examples; nature of the invention; the state of the prior art; the relative skill of those in the art; predictability or unpredictability of the art; and breadth of the claims. *In re Wands*.

Pat's Claim 1 is fairly wide, seemingly covering any molded-zipper cable assembly containing two molded electric wires. Using the PHOSITA described above in **Utility**, Pat has captured embodiments of all different types of cables and applications. However, Pat has also clearly explained at least two suitable methods of producing those cables, its simplicity in encapsulating those wires, and additional materials that could be used. Where one method for making and using the claimed invention bears a reasonable correlation to the entire scope of the claim, enablement is satisfied. *Fisher*.

The gap filling issue would pertain to releasably attached, described only as means like a zipper, but the state of the PHOSITA tells us it is enabled. A PHOSITA attempting attachment *between zipper teeth* would not experiment for long to determine a way to connect those wires. Pat also teaches that the zipper need not travel the entire length and Pat described all this seemingly having less knowledge than the PHOSITA. Prior art regarding zippers, and the relative mechanical simplicity required along with examples would further show this to be enabled.

Pat's Claim 2 is also enabled. The specification clearly shows the preferred embodiment along with its operable usage, the attachment of earphones to one end and a jack to the other, as well as the selection in headphone jacks applicable. A PHOSITA in electrical wire technology would be easily capable of putting together a headphone system placed upon the dependent claim plus the independent claim 1 and the correlating specification.

-Written Description

The written description requirement subjectively determines whether the inventor, at the time of invention, was in possession of the invention to which he claims. *Gentry Gallery*. The written description should reasonably convey to the PHOSITA the inventor's possession of the claim subject as of the filing date. *Id.*

Pat limited claims via the disclosure of "zipper teeth" in Claim 1. The typical written description problem that would inure from an attachment and "releasably attached" *connection system* would be something that causes serious problems – the claim scope would be too wide for what Pat had claimed, and he would have to show that he reasonably possessed all connection means (e.g. Velcro, double-sided tape). By limiting his claim to a zipper teeth system, and teaching that the zipper itself could be used as a means for releasable attachment *may* limit him to just a zipper based system. The question becomes what the PHOSITA would consider "releasably attached" in the context of the connection. Perhaps a PHOSITA could determine a "releasably attached" system sans zipper. If Pat went back and amended his claim narrow the scope to a classic YYY zipper, he would be fine. Right now, I think the PHOSITA would understand Pat possessed the zippered system with a "releasably attached" zipper, and meets the written description requirement – outside of this it may be difficult to say.

With respect to claim 2, which is a dependent claim narrowing the scope of 1 and reflecting in the headphone embodiment and different components utilizable listed in the specification, there is no challenge to make – the PHOSITA would clearly understand that the inventor possessed a headphone apparatus including the system in Claim 1.

-Definiteness

Definiteness requires one or more claims particularly pointing out and distinctly claiming the subject matter the applicant regards as his invention -- whether the PHOSITA would understand what is claimed when the claim is read in light of the specification, and whether it is *insolubly ambiguous*. *Orthokentics*; *Standard Oil*.

The only portion of the claim language in either Claim 1 or 2 that could possibly be challenged is the “releasably attached” language. However, in light of the exemplified means placed in the claim language, as well as the general aura of zipper technology that surrounds the total specification, a Court should be easily capable of stating that the claim in total is still narrow enough to show that “releasably attached” indicates a zipper-like device meant to separate the two wires. Pat further disclosed this by stating that it need not run the full length. Even if the court could not determine that, it would still be able to utilize the file wrapper and extrinsic materials to construct the claim as a zipper-device. Both claims are definite.

Novelty – 102

-Date of Invention

Novelty ensures that the invention is original to the patent applicant/patentee, thus having no anticipating prior art. Non-novelty requires all of the elements of the patent invention be covered by one existing piece of prior art. It does not discern between fields of use, and must be enabling, but does not require utility. However, we must first determine the invention date -- any

materials before this may be concerned pertinent prior art. This usually occurs when the inventor practices an invention's embodiment and appreciates that it works for its intended purpose.

Here, it is at the latest 10/1/2009, when Pat finished a working prototype. The 7/1/2009 date is problematic because no evidence appears that Pat neither practiced an all-elements embodiment nor appreciated its successful operation. See below for issues regarding conception and possible 102(g) issues.

102(a)

An invention known or used by others in the U.S. *or* patented or described in a printed publication anywhere may anticipate the invention if it contains all elements of the invention to be obtained.

The enabling description of the shoes given to Pat by Friend on 7/1/2008 may be prior art. While this meets the known or used mark and is apparently enabling, this is not prior art because it must be known/used within the U.S. The description of the item to Pat, which appears to not exist in the U.S. based upon its relative lack of knowledge in U.S. cannot anticipate Pat's claims.

The second possible piece of prior art is the Bolo necktie patent granted in 1954 – it may act as prior art considering its patent issuance 45 years before Pat's RTP, but it does not contain *all elements* of the invention at hand – Pat's invention clearly claims the *electric* wires have the mold added with teeth, where as the teeth seem cut into the bolo tie. The necktie does not anticipate Pat's invention.

The third piece of possible prior art is the French magazine ad published on 12/1/2008 showing a picture of the prior described shoelaces. This may fall into 102(a) prior art because they constitute a printed publication. The test of printed publications, whether they were publicly available regardless of country, is clearly meant in a publication widely disseminated amongst a

country and showing a picture of the zipper shoelaces. However, this too fails to anticipate – the invention requires electronic wires, as well as a molded material wrapped around said electronic wires impregnated with the zipper teeth. The only elements that could be reasonably met are the releasable zipper system. It does not anticipate

The zippered jumper cables produced by AI, appear to anticipate claim one in full, containing the electric wire elements, the molded zipper, the teeth impregnated mold, and a central pull like zipper. Note that it would NOT anticipate dependent claim 2, as claim 2 contains the headphone assembly, and the clips on AI's invention would not be an issue, the measurement is towards the elements contained in the invention. However 102(a) requires a *public disclosure* that is basically just non-secret. *Rosaire*. Under the facts given though, AI only completed a prototype that was never disseminated before the priority date, failing the known or used test. Further, he would miss on printed publication or patented, because the application postdates Pat's invention date. The AI invention does not anticipate.

ZipSpeakers are not 102(a) prior art; they were released at least 3.5 years after Pat's invention date.

102(b)

102(b) puts inventions patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of application for patent in the United States. 102(b) creates a grace period window that sweeps out both the patent applicant and third party disclosures that occur up to one year prior to the date of application. Pat's application occurred on 1/1/10, which places the grace period ending date at 1/1/09, anything before that which fully anticipates the claims may be concerned prior art.

102(b) analysis is not triggered with this patent. Pat filed his invention only three months after his reduction to practice, which means that all prior art references rejected under 102(a) are also rejected under the 102(b) calculus, because no way exists for him to anticipate himself under 102(a), and no disclosure of the invention was made between invention and filing. Further, no other public disclosures of Pat's invention were made within that window. Pat also did not place the invention on sale, nor make a public experimental use of the device. Even if AI went public with his invention on 12/1/2009, it would not be placed in as 102(b) art based on timing (after critical date).

102(c)

Pat has not expressly abandoned his invention nor has he tried to exploit it as a trade secret.

102(e)

102(e) allows inventors to backdate published patent applications and published patents to the date of filing after the patent issues or is published. The Bolo necktie is useless because it already fails to anticipate. With respect to AI's invention, while anticipating, the backdating of the published patent application would only set to 12/1/09, which is still after the invention date of 10/1/09 established by Pat's successful prototype, and does not become 102(e) prior art.

102(f)

Barring other facts that could be presented, there appears no reason that Pat did not himself invent the subject matter sought to be patented. The evidence must be clear, satisfactory, and beyond a reasonable doubt – on the facts placed this cannot be met.

102(g)

Under 102(g) if an inventor either (1) establishes prior invention OR (2) the invention was made in this country by another inventor before the applicant's invention who had not abandoned suppressed, or concealed the invention, the prior inventor may claim priority. (g)(1) requires the PTO declare an interference, which does not apply here. Under (g)(2) however, AI reduced to practice Claim 1 (NOT CLAIM 2) before Pat, but Pat may or may not have conceived of the invention before hand, which would allow him to claim the conception date as the invention date. Note that AI's abandonment of the patent *post-filing* does not matter here – under 102(g) abandonment is concerned with the time between RTP and filing.

102(g) is triggered here is because AI both conceived (6/15/2009) and reduced the art to practice (7/1/2009) of Claim 1 before Pat's RTP (10/1/2009). Pat will now have to show: (1) That he conceived the invention before AI's conception, and (2) that he was diligent in bringing the patent to filing. Conception will require Pat to show he had a definite and permanent idea of the complete an operative invention as is to be applied in practice and actual reduction later. On 7/1/2009, the idea was picked up and prototype being made – could be conception, but practically AI would still win with first reduction to practice. 7/1/2008 could possibly present a conception, but the zippers in the mold isn't clear – could have made zippered cut wires or a sliding “flat” zipper. Conception is probably not met, as it is a high standard.

Assuming that Pat did establish conception in 7/1/2008, he must still show diligence in work towards filing between 7/1/2008 and at least 7/1/2009, when he clearly began working again until 10/1/2009. The key issue here is that Pat let it sit for a year, but he claims work got it the way. A full time job may establish diligence, but one could question if Pat actually could have worked on RTP on the side. This is just a formality -- the conception of the complete and operative invention, despite not needing know every single bolt, is problematic without knowing how the wires would “zip” together. Unless he can show evidence to conception, Pat loses.

103 – Obviousness

The section 103 obviousness inquiry objectively asks whether a PHOSITA would consider the subject matter as a whole obvious at the time of invention. *Graham* requires the court: (1) Determine the scope and content of the prior art; (2) ascertain the differences between the prior art and the claims at issue; (3) find the level of ordinary skill in the pertinent art; (4) determine the obviousness or nonobviousness of the subject matter; and (5) apply secondary conditions as might be relevant.

103 prior art is held by a two part test. First, ask whether the art is from the same field of endeavor, regardless of the problem addressed. If that fails, then ask whether the reference is reasonably pertinent to the particular problem with which the inventor is involved. *Clay*.

The Bolo necktie and the French magazine ad will count as prior art under the *Clay* factors. Despite not being from the same field of endeavor (which is close), both pieces of prior art seek to solve the same *problem*: Keep wires neat and tidy via a “zippering” system of some type. The all elements rule is NOT placed in the obviousness calculus – rather, as long as it would fall under a 102 prior art category if not for failing to anticipate, it is 103 art. NOTE: A fact has to be placed here that ear buds are part of the prior art. If they weren’t this problem would make *no* sense.

AI’s jumper cables and the Zip Speakers are not pertinent prior art. As to the AI, the invention was not publicly disclosed before Pat’s invention date and is out: Pertinent still requires placement before invention date. *Calmar* would not save that reference either, secret prior art only backdates to the date of filing, not invention. As to ZipSpeakers, they clearly do not constitute prior art for the reasons listed above in the novelty section.

The only difference between the prior art and invention seems to be that the teeth system has not been applied to electrical wires. The zipper exists on the shoes, the release apparatus exists

on the Bolo tie, and the teeth are placed into both. As for a PHOSITA, the definition of the ordinary mechanic with skill in electric wire design seems fair. We also place all prior art before the PHOSITA, as he is assumed to know all of it. *Winslow*.

Based upon the familiarity of the Court to hold everything obvious that isn't a case like *Adams*, a court would probably find this obvious. Faced with the problem of tangling electrical wires and left with the solutions of zippering shoe laces, which easily tangle, the zippering mechanism of the Bolo tie around a central apparatus, and the tooth like protrusions emanating from the wires in both, the PHOSITA would at a minimum finding it obvious to try taking the tooth protrusions and placing them onto the ear bud wires to keep them from tangling. The electrical wire PHOSITA would be aware of the tangling and wire control problem, and would obviously applying the zipper wire control systems to earbuds. The only secondary consideration that may apply, depending on how old electric wire tangling has existed as an issue, would be possible the solving of a long-felt need. However, this will be difficult to overcome the obviousness to the PHOSITA of taking the components in front of him and applying them to the wire problem.

2.

BS is going to be sued for direct infringement under 271(a). Infringement first constitutes an issue of claim construction and the all-elements rule as placed in the novelty inquiry – does the infringing device contain all of the elements that exist in the patented invention. *Phillips*.

As a preliminary matter, BS should definitely utilize any of the arguments above in Section 1 that would invalidate the '123 patent. Invalidation of '123 patent makes it unenforceable and thus dismiss the infringement suite.

As to literal infringement, the court must construe the claims before any determination of whether the accused devices infringes may be made. *Markman*. Claim construction is a matter of law; the jury later determines infringement of the claims. We begin with the claim language – its ordinary meaning to the PHOSITA, context, differentiation, removal of non-pertinent preambles, and whether means support a means plus function claim. *Phillips*. Next one moves to the context with the rest of the patent – what the specification states in terms of claim terms, and whether the applicant disclaimed any material. Next is intrinsic evidence – file wrappers, explicit disclaimers, and/or rejected claims. Only then is extrinsic evidence examined, and if that fails, the court should construe claims to sustain validity if possible.

Here, the elements of the '123 patent Claim 1 constitute a first wire, a second wire, a material molded around those wires, teeth molded to the thermo resistant material, and said teeth being releasably attached to the zipper teeth. Pat is going to argue that the meaning of releasably attached is a type of device that allows for the zipper teeth to engage and disengage the two wires, as read in light of the patent specification. Pat will also argue that Claim 1 is not limited to the earphones, but rather, read broadly, to a cable assembly of two wires capable of zipper interlock.

Seeing that ZipSpeakers includes a first wire, a second wire, material molded around those wires (rubber being thermo-resistant), and metal zipper teeth connected to rubber shielding, there may be a way from BS to wriggle free.

The first is a narrow construction of how the teeth are to be connected to the shielding – Pat's patent continually refers to molding of the material around the wires and teeth *molded* to the electrical wires. If ZipSpeakers did not place their cables on via a molding process, or alternative glued on or attached the teeth in another way, the claim would not be literally infringed as the element of *molded* on shielding and/or teeth would not be infringed by the accused product.

The problem with this argument is the doctrine of equivalents, which states that if the accused product or process performs the same function in the same way, and contains elements identical or equivalent to each claimed element of the patented invention, the patent is infringed. *Graver Tank; Warner-Jenkinson*. The gluing on of teeth or the wrapping of rubber then hot glued at a seam is a slovenly equivalent of molding on thermo-resistant material and the teeth to Pat's device. This presents the direct policy issue of placing the doctrine of equivalents in the law: To avoid allowing the public to create insignificantly different copies of a patented device.

The second concerns the releasably attached issue again. The facts tell us that the wires could be zippered together, but if the court narrowed the scope of the claim to only zippers being used as the releasably attached portion, BS could skate by via another method that puts zipper teeth together in a releasably attached manner. How that would possibly work, I have no idea. There are two points I express here. First, if not all of the elements of the claim are met, there is no literal infringement. More detailed facts on BS's product assembly may help in defending that claim, e.g. whether a seam exists, how the teeth are attached, how BS may have gotten around the releasably attached issue. The second point I make is that all of those differences will be for naught under the doctrine of equivalents – the wire shielding and teeth attachment infringe a *device*, NOT a process. Further, good luck finding a different way to releasably attach from zipper teeth. BS is going to be found liable as to Claim 1. Note – there is no basis for inequitable conduct.

Claim 2 is a dependent claim narrowing Claim 1 to a headphone assembly configured to move audio from a jack to headphones. A broad construction would still require "headphones" be involved in some way or fashion, and the specification notes "earphone wires" and well as coupled to an "earphone." It also clearly delineates multiple headphone jacks in the description. BS thus will be safe. First, their infringing device offers no jack, nor does it contain an equivalent to a headphone jack – it provides either speaker plugs or stripped wires for stereo

speaker clamps. Second, and more important, the plus are not the same the jacks specified and Big Stereo offers no option for them. There is neither literal infringement, nor jack equivalent element.

3.

Assuming that Big Stereo is selling such devices, no contributory infringement or inducement would occur. As to contributory infringement, the headphone jack in question is clearly capable of substantial non-infringing uses, such as the personal/commercial construction of headphones that do not utilize the '123 patent or a replacement part for a non-infringing pair of headphones. Big Stereo would also not be inducing because there is no evidence that Big Stereo is encouraging or instructs direct users to infringe. The mere sale of the product, without evidence that they meant it to specifically infringe the '123 patent or teach direct infringers how to do so, is not enough to attach liability.

4.

Under the AIA, the validity analysis would change *drastically*. Adding to the 1952 102(a) prior art stated above, AIA 102 would include the shoelaces actually used in France, AI's jumper cables, and the ZipSpeakers. The time of filing is now the priority date in both the 102 and 103 calculi – anything before 12/1/13 is in, and Pat's grace period would now be until 12/1/12. The shoelaces, assuming used widely in France would constitute a prior public use under 102(a) because the geographic distinction leaves, but would not still anticipate all elements. AI's jumper cables would anticipate claim 1 as stated above, and now *would* be part of the prior art under 102(a)(2) as an application for patent published not saved by any of the 102(b)(2) exceptions, making Pat's **Claim 1** non-novel and therefore non-valid. The ZipSpeakers would, as stated in Question 2, may anticipate, and for novelty purposes differences in Claim 1 would

probably be considered inherent – as to its novelty, it would be a public use under 102(a)(1) in July 2013, six months before invention. The obviousness analysis would also change under AIA 103, and all of the pertinent prior art from the 1952 103 AND the French known use, the jumper cables, and the ZipSpeakers would be considered pertinent prior art. If the court didn't find novelty problems, it will *definitely* find that a PHOSITA utilizing all that prior art would have combined those elements to get to Claim 1, and maybe even go further to Claim 2 and state that the placing of a headphone jack and headphones onto ZipSpeakers would be obvious to the PHOSITA. Regardless, the patent will be invalidated.