

**Question One****Section 101—Patentable Subject Matter**

The Court has read the language of section 101 to prohibit patent protection for laws of nature, physical phenomena, and abstract ideas. *Chakrabarty*; *Bilski*. RMC's best argument on this front is that the '123 patent essentially claims the abstract idea of measurement and merely adds generic, digital implementation, failing to transform the abstract idea into a patent-eligible invention. *See Alice*. After establishing that the invention is an abstract idea, we ask if it was implemented in a non-conventional way, or in other words, was there an inventive concept over and above the abstract idea. *Prometheus*. Thus RMC would argue that using a roller to measure was already part of the art and that all Pat did was add a tape measure and digital display, which are not sufficiently inventive steps to transform an abstract idea into patentable subject matter under *Alice*.

Pat's response will be that the second steps of the *Alice/Prometheus* framework will not come into play, because the '123 patent clearly claims a physical apparatus, qualifying as machine, manufacture, or composition of matter under section 101. Unlike methods of hedging or mitigating settlement risk (*Bilski/Alice*), Pat is undeniably claiming a physical object, rather than an abstract idea or method. 101 broadly encompasses products of human ingenuity, or "anything under the sun made by man." *Chakrabarty*. Thus, despite the Supreme Court's recent willingness to strike down patents on subject matter grounds, arguing that the '123 patent is not patentable subject matter, and Pat should prevail.

**Question Two****Utility - §§ 101 and 112**

Pat may see a challenge to the '123 patent on utility grounds, but it will likely be easy to overcome. The utility requirement requires the inventor show, *at the time of the invention*: 1) operable utility, 2) practical utility, and 3) beneficial utility. Operable utility requires that an invention work for its intended purpose; it is presumed unless the PTO can show that a PHOSITA would find the invention inherently unbelievable. Practical utility requires a showing of both specific and substantial utility. *Brenner; Brana*. Beneficial utility requires a showing that the invention is not socially harmful or deleterious. *JuicyWhip*.

Here, the claims of the '123 patent provide sufficient information to assure PHOSITA that the digital tape measure works for its intended purpose; therefore there is operable utility. In light of the prior art performing similar functions, it is difficult to argue the '123 patent's function is inherently unbelievable. Moreover there is practical utility, because the digital tape measure—in allowing for extra-sensitive measurements, ensuring the roller moves in a straight line, and providing a digital display—clearly provides a *well-defined and particular benefit to the public*, that is *significant and presently available*. *Fisher*. An adversary may argue that, because Pat made more prototypes after filing and because there was often 1/16" discrepancy between the tape and LCD screen, the product was not finished and did not yet provide a specific benefit. However, Pat can clearly show that the version he did file a Patent for worked for its intended purpose and he did not file early before he knew if the product worked, therefore granting him a patent would not amount to a hunting license. Finally, the digital tape measure has no socially harmful implications, making beneficial utility easy to meet (if it needs to be met at all any more).

**Section 112 Requirements****Enablement**

Section 112's enablement provision requires that the specification describe the invention "in such full, clear, concise, and exact terms as to enable [a PHOISTA]" to make and use the invention. Enablement is assessed on a claim-by-claim basis at the time of filing and turns on whether a PHOSITA would have to perform undue experimentation in order to make and use the invention. *Incandescent Lamp; Janssen*. Factors to consider in assessing enablement are: the quantity of experimentation necessary, amount of direction or guidance presented, presence or absence of working examples, nature of the invention, state of the prior art, the relative skill of those in the art, the predictability (or unpredictability) of the art, and the breadth of the claims. *Wands*.

In asking whether the specification has enabled the entire claim scope, we note that Pat's first claim is narrow. The prior art available at this time included conventional tape measures and the rolling measurement device (RMD) from RMC (because enablement is assessed at the time of filing, the RMD, which was being sold in stores by April 1, 2001, was part of the prior art for enablement purposes at the time of Pat's filing, January 1, 2002. Pat has explained that tape is used, how the tape should be wound, the placement and function of the roller, and that there should be a digital display. An adversary may argue that Pat did not disclose his algorithm for combining the readings from three roller sensors for accuracy, however, claim one does not require the use of multiple sensors, it only requires a "means for providing a measurement of the rotation of said roller." A general means for measuring the rotation of a roller is clearly established in the prior art, as demonstrated by the RMD. Because the prior art provides

numerous working examples and claim 1 is narrow, it is unlikely that a PHOSITA would have to perform undue experimentation, if any at all, in order to make and use claim 1.

Claim 2, on the other hand, is more broad, claiming “a measurement indicia within the housing” generally and a roller that rotates in “correspondence with removal of said measurement indicia from said housing.” The specification explains that “other measurement indicia might be used” aside from a rigid tape blade, “such as rope or cloth tape.” While this claim perhaps decreases the usefulness of a conventional tape measure as prior art, claim 2 still does not seem too burdensome for a PHOSITA would recreate.

### **Written Description**

Pat will likely face a written description challenge to the ‘123 patent, and this challenge will be more difficult to surmount. The written description requirement assesses whether, at the time of filing, the inventor was actually in possession of the claimed invention. *Gentry Gallery; Ariad*. The test is subjective and asks whether the specification clearly allowed a PHOSITA to recognize that the inventor possessed the claimed invention as of the filing date. *Ariad*.

First, we note that Pat did not amend any of his claims at any time, so the written description issues looks at whether the claims are too broad. As to claim one, the PHOSITA described above would easily conclude, based on the specification, that Pat possessed the claimed invention, a digital tape measure involving a rigid tape blade that rotates a roller when extracted.

However, claim 2 is written more broadly, which may create problems in the written description inquiry. The language of the specification itself suggests that Pat may not have possessed or used the invention in any embodiment involving a measurement indicia other than a rigid tape blade, as it says “a digital display measuring device” and that “other measurement

indicia *might* be used, such as rope or cloth tape.” This language suggests Pat is claiming any and all materials that may theoretically be used as measurement indicia. Pat will argue that the inclusion of other means in the specification plainly shows that he “subjectively possessed” what is claimed in claim 2, but the broad nature of the language used makes this a difficult argument. Because of this and the fact that the system for making the roller rotate when other “measurement indicia” materials are used may operate differently, a PHOSITA could reasonably conclude that Pat did not possess, as of the filing date, the invention as broadly claimed in claim 2.

### **Definiteness**

The definiteness requirement derives from section 112(b) and requires that the claims lay out sufficiently clear metes and bounds, so as to put the public on notice of the boundaries of patent protection. Claims will be found indefinite only if they are “insolubly ambiguous;” a claim is not insolubly ambiguous if a PHOSITA, even with great difficulty, can construe the claim in light of the specification. *Standard Oil*. Here, the only term that could be considered ambiguous is the “measurement indicia language” in claim 2. However, in light of the detailed specification, suggesting other materials such as rope or cloth tape, it is clear to the PHOSITA that Pat seeks to prevent others from largely copying his invention, but avoiding literal infringement by using a measurement means other than rigid tape. Thus, both claims 1 and 2 meet the definiteness requirement, as they allow a PHOSITA to understand what is claimed in light of the specification.

### **Section 102—Novelty and Statutory Bars**

#### **Date of Invention**

Given how section 102 is formulated, discerning the date of invention under section 102(a) is critical. The date of invention will be the point in time where there was reduction to practice (RTP). To prove RTP, the inventor must 1) have practiced the embodiment of the invention encompassing all elements, and 2) appreciated that the invention worked for its intended purpose. If the invention never reaches RTP or if the date of RTP cannot be proven (because proving RTP requires corroborating evidence), the filing date is used (constructive RTP). *Barbacid*.

Here, it appears that Pat conceived of the invention on December 1, 2000, after seeing advertisements. Pat's RTP occurred on February 1, 2001, as he had prototype he was satisfied with and did not make any major changes later. Moreover, because he showed it to a friend, he will be able to provide corroborating evidence to prove this date was his actual RTP.

RMC appears to have conceived of its rolling measurement device (RMD) as early as January 1, 2000 when it was advertising it in on TV and in brochures. Its RTP does not appear to be until April 1, 2001, when it was first sold in stores. Any arguments by RMC that TRP was earlier than that should be silenced by the customer service representative's "we're working on it" answer to Pat's March 2001 inquiry.

### **§ 102(a) Novelty**

The '123 patent will be challenged for lack of novelty. Section 102(a) dictates that a patent will not be granted, for lack of novelty, if, before the date of the invention, 1) the invention was known or used by others in this country or 2) was patented or described in a printed publication anywhere. In order for prior art to anticipate an invention, it must meet the "all-elements rule"—meaning every element of the claimed invention must be disclosed by a single reference, either expressly or through the doctrine of equivalents (DOE). *Robertson*.

The first piece of prior art is the tape measure, which had been used long before Pat's idea for the digital tape measure (DTM). Therefore, before Pat's invention, the tape measure was widely known and used in the U.S. and therefore constitutes prior art. However, the tape measure does not anticipate the DTM patent, because it fails the all-elements rule. Specifically, the tape measure does not contain a roller, a means for providing a digital measurement, or a display measure for the digital readout.

The second piece of potential prior art under 102(a) is the RMD. Because the critical date is February 1, 2001, Pat's date of invention, any prior art under 102(a) must enter the art before that date. While the RMD was not used before the critical date, it appears that it was publicly known by at least January 1, 2001, when commercials were airing and brochures were going out. To be publicly known, an invention must be reasonably accessible to the public. *Nat'l Tractor*. Because the TV commercial appears to have been advertised based on Pat's viewing, it is likely that the invention was publicly known as of January 1, 2000 as well. Second, the brochures advertising the RMD likely constituted printed publications. For a printed publication to be prior art, it must be widely disseminated and publicly accessible. *Klopfenstein*. Pat's receipt of the brochure suggests it was disseminated broadly as part of a sales effort and therefore clearly available to the public.

Though the RMD is prior art, it will not anticipate the '123 patent for failure to meet the all-element rule. Specifically, there was no wound tape or physical measurement device within the housing of the RMD, and the roller of the RMD rolls by pushing it along the surface rather than in conjunction with the interior measurement indicia. One could make a DOE argument, first arguing that tape is merely an addition (the patent can still anticipate without the tape, because of the "comprising" language) and that the way the roller is activated and measures is

essentially the same. The doctrine of equivalents holds that if *each element* of the accused product or process, while not literally anticipating, performs substantially the same function in the same way, and obtains the same result. *Graver Tank; Warner-Jenkinson*. RMC or the PTO could make a strong policy argument for applying DOE here because Pat substantially copied their invention, but merely added a tape measure. Pat's strongest defense may be that the publication or advertisement was not enabling, therefore it cannot anticipate. *Hafner*. However, because the Supreme Court cautioned against construing DOE too liberally Pat's addition of the tape measure solved some of the problems of the RMD, the RMD will not anticipate the '123 patent under 102(a), though this is likely a very close call under DOE.

#### **Statutory Bars § 102(b)**

Section 102(b) denies patent protection if, more than one year prior to application, the invention was 1) patented or described in a printed publication anywhere or 2) in public use or on sale in the United States. Pat filed on January 1, 2002, so the critical date is January 1, 2001. Because Pat filed less than one year after RTP, 102(b) will not create any additional prior art references than those already considered under 102(a). It is unclear what the exact date that Pat gave a prototype to his friend to test the accuracy was, which could potentially be public use before January 1, 2001, but the limited nature of the disclosure for the specific purpose of testing suggests it was experimental use. *City of Elizabeth*.

#### **§ 102(c) & § 102(e)**

Neither section 102(c) or 102(e) appear relevant to the validity of the '123 patent.

#### **Derivation § 102(f)**

While Pat may have gotten the idea from the RMD, he added to the idea and did independent work, so it would be difficult to prove derivation by clear and convincing evidence.



**Priority § 102(g)**

Section 102(g) provides the rules for determining which competing inventor will be given priority. Generally speaking, under 102(g) the first inventor to RTP gains priority. However, the first to conceive can prevail over the first RTP if the first to conceive showed unbroken diligence—meaning steady, industrious efforts—from a time prior to the other inventor’s reduction to practice through the inventor’s own RTP. To prove earlier conception, the inventor must show that he had a definite and permanent idea of the complete invention such that only ordinary skill would be necessary to RTP—if conception cannot be proved, it collapses into RTP.

Here, Pat’s RTP was February 1, 2001, when he developed the prototype. RMC appears to have conceived as of January 1, 2000 as it was actively advertising the product but its RPT was not until April 1, 2001. The key inquiry is therefore whether RMC was diligent in bringing the product to market. Reasonable excuses for inactivity can be illness or regular employment. The 15-month delay between conception and RTP is too long to explain, especially for a corporation, and Pat should prevail over RMC under 102(g)(2).

**Obviousness - § 103**

The obviousness requirement assesses technical, rather than economic, triviality at the time of invention. It asks whether a PHOISTA, faced with the same problem, would select the patented elements to combine. Courts apply the five-part *Graham* test: (1) determine the scope and content of the prior art; (2) ascertain differences between prior art and claims at issue; (3) find level of ordinary skill in pertinent art; (4) determine whether subject matter is obvious; and (5) weigh secondary considerations to determine obviousness.

In step one, we note that all references that constitute prior art under section 102 also constitute prior art under the section 103 obviousness inquiry, as long as the art is analogous. Here, the ‘123 patent is squarely within the same field of endeavor—measuring tools—as the two pieces of prior art, the tape measure and the RMD, meaning the prior references are both analogous. *Clay*.

As discussed in detail in the Novelty inquiry above, the principal difference between the ‘123 patent and the RMD is the addition of the interior measuring device and the way the roller is moved. Likewise, the ‘123 patent differs from the original tape measure in its use of a roller and digital display.

In assessing the level of ordinary skill in the art (third factor), we presume that the PHOSITA knows all of the pertinent prior art. *Winslow*. Moreover, the PHOSITA is not an automaton, and is deemed to be a person of ordinary creativity, capable of making inventive leaps based on his skill and knowledge of the prior art. *KSR*.

In light of the *Graham* factors, it seems likely that the ‘123 patent will be found invalid on obviousness grounds. Pat essentially took the RMD and the tape measure, and combined the element of the two. While Pat worked on an algorithm to ensure the accuracy of the digital display, he did not claim that and, in any event, the ‘123 device appears to be less accurate than the RMD. A PHOSITA, faced with the problems of the RMD and employing ordinary creativity, would likely combine these two inventions to solve it. In light of these factors and given how close the novelty inquiry was, Pat’s invention seems too trivial an advancement over the RMD to be granted patent protection.

**Question Three****Literal Infringement**

Pat will argue that the Marking Rolling Measuring Device (MRMD) literally infringes the '123 patent under section 271(a). An invention only literally infringes a patent if it satisfies the all-elements rule. In order to apply the all elements rule, the claims must first be construed as a matter of law. *Markman*. Once the claims are construed, application of the claim language to the accused device is a question of fact for the jury. To interpret claim language, we begin by looking at intrinsic evidence—including the claims, specification and drawings, and prosecution history—before turning to any extrinsic evidence, such as dictionaries, experts, inventor's testimony, etc. *Phillips*.

Starting with the broader claim, claim 2 of the '123 patent contains the following elements: housing, measurement indicia within the housing, a roller that rotates in conjunction with the removal of the measurement indicia, means for providing a measurement of the roller's rotation, and a display to receive the measurement and convert it to a digital readout. RMC will argue that its new device (MRMD) does not contain all the elements of this claim, because it does not have a tape or other measuring element within the housing. RMC will argue for a narrow construction of "measurement indicia within the housing," so as to exclude its marking device. Moreover, it will argue that its roller operates in a different way: it is moved along the surface it is measuring and records its roller's rotations, while Pat's device specifically and narrowly requires that the roller "rotates in correspondence with removal of said measurement indicia" from the housing. Pat will counter by arguing that marking mechanism in the MRMD qualifies as a "measurement indicia within the housing," sufficient to meet the all-elements rule. All other features: a housing, the roller, a means for providing a measurement of the roller's

rotation, and the display component appear to meet the all-elements rule. Further, Pat will argue DOE in the alternative, asserting that the new marking feature of the MRMD performed substantially the same function in the same way as the tape measure, assuring a straight line and providing a physical measurement to compare with that of the digital display, two of the features Pat sought to create in the first place. *See Graver Trank, Warner-Jenkinson*. The roller still also performs the function of measuring the distance covered and communicating with the digital display, even if it is moved in a different manner. Therefore, even if a court found that claim 2 was not literally infringed by the MRMD, the DOE argument will likely be difficult to surmount, and Pat should prevail on his claim for infringement with respect to claim 2.

With claim one, the literal infringement argument will be harder for Pat to make; this claim is narrower and the claim expressly requires a tape wound on a reel within the housing. MRC will argue for a narrow construction of “tape wound on a reel within the housing” and “the tape causes the roller to rotate.” As far as literal infringement goes, this should definitely be a successful argument, as the MRMD plainly does not contain such an element, so it does not meet the all-elements rule though it does contain a marking mechanism. The MRMD does, however, contain an interior marking mechanism to draw a line on the surface it is measuring and provide marks. For this reason, Pat will likely make a similar DOE argument to the one made above, as to claim 1. Again, the marking mechanism provides the same function in substantially the same way as the tape measure (ensuring a straight line and provide physical marks for comparison with the digital display). Therefore, this feature ultimately leads to the same result of solving the same problems that Pat’s invention sought to solve. Pat therefore again has a strong DOE argument.

Perhaps, MRC's strongest defense would be to argue the affirmative defense of inequitable conduct, for Pat's failure to disclose the original MRD as prior art in his patent application. To show inequitable conduct, the alleged infringer must demonstrate: (1) intent to deceive; and (2) materiality. *Therasense*. To prove intent, the alleged infringer must show by clear and convincing evidence that (1) the applicant knew of the reference, (2) knew it was material, and (3) made a deliberate decision to withhold it. *Id.* To prove materiality, one must establish that the PTO would not have allowed the infringing claim if it had been aware of the undisclosed prior art. Based on the discussion in question one revealing serious questions about the novelty (under DOE) and obviousness of Pat's '123 patent, there is at least an argument that Pat's omission of the MRD in the prior art is material. Furthermore, there is clear proof that Pat knew about the MRD. In fact, he appeared to conceive his idea for the '123 patent only after seeing MRD advertisements. It still may be difficult to prove this high level of intent from circumstantial evidence, but based on Pat's clear knowledge, it is an argument worth making for MRC, because it likely otherwise infringes under the DOE.

**Question Four**

In some respects the AIA will change the validity analysis above, but not a great deal, and it does appear that RMC never filed for a patent. Under section 102 of the AIA, the first to file wins the patent, except where (1) the second filer was first to publicly disclosed; (2) the first filer obtained the invention, directly or indirectly, from another person; or (3) the first filer abandoned the application prior to publication or issuance. Because the AIA renders any reference a part of the prior art if it was created before the effective filing date, not the date of invention, the RMD would be even more clearly established as prior art, because it was being sold and widely used by April 1, 2001, well before Pat's January 1, 2002 filing date. However, because the printed publication rule stays the same and the invention was publicly known due to the commercial advertisements, the same pieces of prior art would be relevant under the AIA and the novelty analysis above would remain unchanged. Moreover, because the AIA does away with priority battles, the 102(g) analysis above about who was first to invent would be irrelevant, only the first to file matters. Obviousness is now determined at the time of filing in the AIA, so there would be an even stronger case that the '123 patent is invalid for obviousness. Finally, any potential claim that Pat derived his invention from the RMC would have to go through an administrative derivation proceeding at the PTO, under new AIA section 135.