WHEN NOMINAL IS REASONABLE: DAMAGES FOR THE UNPRACTICED PATENT Oskar Liivak^{*}

Abstract

Reasonable royalties form a critical feature in the patent troll ecosystem. To obtain a substantial patent damage award, a patentee need not commercialize the patented invention; infringement is all that is needed. This surely incentivizes patenting but it dis-incentivizes innovation. Why commercialize yourself? The law allows you to wait for others to take the risks, and then you emerge later to lay claim to "in no event less than a reasonable" fraction of other people's successes. Today, it is rational to be a patent troll rather than an innovator.

Today's interpretation of reasonable royalties is wrong as a matter of patent policy but, somewhat surprisingly, it is also wrong as a matter of patent history and statutory interpretation. The creation of reasonable royalties in the nineteenth century did mark a significant change to patent damages but it was nowhere as sweeping as today's interpretation would suggest. Up to the mid-1800s, the existing routes to patent damages were stringent, available only to patentees who had already commercialized their patented invention. Courts developed reasonable royalties for budding innovators who were laying the groundwork for innovation but who could not yet satisfy the existing strict routes Those cases never extended reasonable to patent damages. royalties to those who simply sat on their patents. Starting in the 1970s, through dubious statutory interpretation, reasonable royalties came unmoored from that foundation. Infringement alone, without any efforts by the patentee to commercialize, became sufficient for substantial damages. Today's view of reasonable royalties is not only unsupported but sits in tension if not outright conflict with those earlier, foundational cases. Properly understood, some efforts to commercialize are a necessary element for substantial reasonable royalties. As a matter of patent doctrine, history, and policy, even if valid, infringed, and enforceable, nominal damages are reasonable for an unpracticed patent.

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INTRODUCTION

Even a casual glance at the news confirms that patent trolling is the most visible and controversial issue in patent law today. They represent half of all patent lawsuits and yet President Obama has described them as extortionists. Despite all the attention and controversy, the problem remains elusive and solutions even more so. What exactly is the problem? Is there a problem at all? Are specific entities (trolls) the problem or are specific behaviors (trolling) the problem? Those are just questions of framing and definition; what about solutions? Proposals range from back end litigation reforms like fee shifting to front end reforms focused on initial patent quality.

In an important article, Mark Lemley and Douglas Melamed suggest that the problem is worse than we realize. They argue that patent trolls themselves are not the problem rather they should be understood as the outgrowth of "more complex and fundamental problems with the patent system."¹ I think they are quite right. That understanding is important because "[t]reating the symptoms will not solve the problems."² We should not add another layer to patent law specifically designed to stop trolls. We should instead first understand why they exist.

Along those lines, a recent op-ed suggested thinking about patent trolls as a biological phenomena.³ Through that metaphor we are lead to think about ecology ask how the current patent landscape provides the conditions for trolls to exist. To thrive, trolls need an abundant and accessible food supply. For the patent ecosystem, this article argues that our current rules for nearly automatic patent damages via reasonable royalties is the critical element of troll food supply.

In essence, today every issued patent can be troll food. Our current understanding has created a mandated floor for patented damages that does not depend on efforts by the patentee to commercialize the patented invention. Instead, patent law presumes that infringement alone causes substantial compensable harm and substantial damages must

¹ Mark A. Lemley & Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117 (2013).

 $^{^{2}}$ *Id.* at 2121.

³ See Yaniv Heald, Trolls as Parasites.

be levied from the infringers whether copyists or wholly independent, innocent infringers. That fact about automatic damages should be the starting place for our understanding of the troll phenomena. With that automatic rule for damages, every patent becomes a potential troll vehicle.

For some time, those that have been targeted by trolls have implored others to avoid settlement and negotiation thereby 'not feeding the trolls.'⁴ What if we applied that advice not to individual lawsuits but instead to the whole patent ecosystem? What if substantial patent damages, even reasonable royalties, were contingent on efforts to commercialize the patented invention? Such a rule would surely reduce patent assertion activity and would surely channel effort toward the socially beneficial acts of commercialization and innovation. Rather than suing ex post, patentees would be channeled towards ex ante technological transfer.

This article argues for exactly such a rule. Not only would it make for better patent policy but in addition, and perhaps surprisingly, such a rule is the correct understanding of our current patent damages statute. As argued below, throughout patent history, substantial damages at law were granted only where the patentee had undertaken some efforts to commercialize. Traditionally where the patentee could not demonstrate the fact of such harm, that patentee would receive no more than nominal damages. That was the traditional rule and the statutory codification of reasonable royalties did not change that rule. And though it is certainly true that the modern patent statute mandates that a successful patentee be awarded "no less than a reasonable royalty", nothing in the statute or caselaw demands that a reasonable royalty must be more than nominal damages. In fact, it is already accepted that reasonable royalties can, in some instance, be nominal. This article simply expands the set of cases where nominal damages are proper. A nominal reasonable royalty is proper where the patentee has not undertaken any efforts to commercialize the invention. Not only will recognition of that rule reduce if not eliminate patent assertion activity, it will also re-emphasize the importance of commercialization and innovation as a central

⁴ See http://arstechnica.com/tech-policy/2014/04/newegg-and-geicostop-patent-troll-that-sued-dozens-over-forms-on-apps/; the notion has even produced a line of T-Shirts: http://www.newegg.com/Product/Product.aspx?Item=N82E1680099622

policy aim of the patent system.

Some explanation is needed to clarify this argument. Though it facially bears some resemblance to a working requirement, this article argues for something different. Traditional working requirements focus specifically on manufacturing of the patented invention and they typically made the validity of the patent contingent on manufacturing of the invention. The arguments here differ in two significant ways from such a traditional working requirement. First, this article does not focus on a requirement for manufacturing or other such physical realization of the invention. Instead the focus is on ex ante technology transfer of the invention. For purposes of this article, a patentee has practiced the patent whenever they have engaged (or are gearing up to engage) in ex ante transactions to get the invention from the patentee into the hands of those that can utilize the invention. Depending on the invention, for example a process patent, that may or may not include any actual manufacturing. Second, as opposed to a traditional working requirement, the proposal put forth here does not impact patent validity rather it just impacts remedies – in particular damages at law.⁵ The article does not argue that patent validity should be contingent on efforts to commercialize. Rather efforts to commercialize are argued to be a necessary element for substantial patent damages at law including reasonable royalties. In short, inventing is necessary to receive a patent, but innovating is required to accrue substantial damages for the infringement of that patent.

Furthermore, this proposal is also distinct from patent misuse. The proposal here does not tie failure to practice the patent with unilateral unenforceability with no remedies against any infringer. Not only would such an argument be in direct conflict with the statute, I think it is bad policy.⁶ As will be argued below, even an unpracticed patent needs to be protected against outright copyists. All patentees should continue to enjoy muscular protection from copyists. Instead this article focuses attention on the remedies available for a particular subset of patentees when asserting patents against a particular subset of defendants. The focus is on the assertion of unpracticed patents against independent inventors. Today such assertions typically result in substantial damage awards

⁵ See John Duffy, Paper Patents.

⁶ See 35 USC 271(d).

via reasonable royalties but this article argues instead, that in light of patent history and patent policy, patent law should award at most nominal damages in those cases.

The changes to patent damages proposed here are best seen by describing their relation to our current understanding of patent damages. The current landscape of patent damages is quite easy to state. There are two choices: lost profits or reasonable royalty. A patentee who is manufacturing and selling the patented invention can claim that the infringement caused lost profits.⁷ A successful lost profits case requires stringent proof of the amount of lost profits caused by the infringement. Not every patentee can make that showing.⁸ For those that fail to prove lost profits, the patent statute provides a safeguard. It guarantees that "in no event" shall a court award "less than a reasonable royalty" as damages.⁹ In other words, reasonable royalty is a floor available to all. That much is clear yet it does little to answer the logically next question: what is this mandated reasonable royalty? Our current understanding of patent damage does not view this question as a hard or even contested. Today, a reasonable royalty revolves around a hypothetical negotiation between the patentee and the infringer at the time infringement began.¹⁰ The hypothetical negotiation aims to set the amount (the reasonable royalty) that the patentee and infringer would have agreed to for use of the invention. Today, the amount agreed to in this hypothetical negotiation is seen as the minimum guaranteed to every patentee after a finding of infringement. For the troll ecosystem, and importantly for this article, that hypothetical negotiation does not hinge on whether the patentee had been practicing the invention.

Patentee	Practicing the Patent	All Others
	Lost Profits	Hypothetical

⁷ For patentees that do not manufacture but are instead engaged in ex ante licensing, they can claim that the infringement caused lost licensing revenue with the amount of damage set by the patentees established royalty rate.

⁸⁸ See Panduit; Herbert Schwartz, Patent Law and Principles

⁹ 35 USC 284.

¹⁰ For exploration and criticism of the hypothetical negotiation as the central feature of reasonable royalties, see David O. Taylor, USING REASONABLE ROYALTIES TO VALUE PATENTED TECHNOLOGY.

	(or Established Royalty)	Negotiation	
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Table 1. The Current View of Patent Damages

Table 1 provides a quick summary of the current state of patent damages. A few points should be made. First, the status of the defendant largely does not matter for today's patent damages.¹¹ The same two choices are available whether the infringer was an outright copyist or had instead independently invented the patented invention.¹² Second, efforts by the patentee to commercialize the patented invention are not necessary for substantial patent damages via a reasonable royalty. Certainly they matter for lost profits or established royalty, but unpracticed and practiced patents are generally on an equal footing for substantial damages via reasonable royalties.¹³

Our current damages landscape is simple but as argued by this article it is too simple and overlooks important policy and doctrinal/historical issues that, when properly understood, provide for a more varied terrain to patent damages. The Supreme Court in one of its earliest in-depth discussions of patent damages warned against the "great injustice" of applying the same rule of damages to all cases "without regard to their peculiar merits."¹⁴ Indeed the Court seemed to be pointing toward a much more varied landscape. The Court emphasized factual differences between defendants that, though infringing, were either infringing in "good faith" or were a "wanton and malicious pirate."¹⁵ Similarly the Court also suggested that patent damages consider factual differences between *patentees*. They pointed to differences between the manufacturing patentee who "may find his profit to consist in a close monopoly, forbidding any one to compete with him in the market, the patentee being himself able to supply the whole demand at his own price"

¹¹ I am putting aside willfulness for now.

¹² Though there is a lively debate over the issue of a defense for independent inventors.

¹³ In fact, there is evidence that as to reasonable royalties, a practiced patent is at a disadvantage as existing licensing agreements can anchor a reasonable royalty. An unpracticed patent is not so encumbered.

¹⁴ Seymour v. McCormick, 57 U.S. 480, 488 (1853)("Experience had shown the very great injustice of a horizontal rule equally affecting all cases, without regard to their peculiar merits.").

¹⁵ Seymour v. McCormick, 57 U.S. 480, 488 (1853).

versus the licensing patentee interested in having "all … use his invention provided they paid him the price of his license."¹⁶ In all, the Court stated that "there cannot, in the nature of things, be any one rule of damages which will equally apply to all cases."¹⁷ And indeed as the historical survey below shows, from 1854 onwards both the patent statute and the Courts have undertaken to fill in and populate this more varied landscape of damages at law. It is only in the last few decades that patent law has, incorrectly in my view, overly homogenized damages by ignoring relevant factual issues for patent damages, and especially for reasonable royalties.

This article aims to make the doctrinal and policy based argument that, as suggested by the Supreme Court already in 1854, patent damages should better account for the factual differences between different patentees and different infringers. Importantly, this article argues that actual damages at law suffered by patentees does hinge on the patentee's efforts to commercialize the patent. Efforts to commercialize form a necessary element for substantial patent damages, including reasonable royalties, for all patentees. This more-varied landscape of patent damages is outlined in Table 2.

Patentee	Practicing	Toward	Not
Infringer	the Patent	Practicing	Practicing
Copyist/	Lost Profits	Hypothetical	Hypothetical
Pirate	(or Established Royalty)	Negotiation	Negotiation
Independent	Lost Profits	Hypothetical	Nominal
Inventor	(or Established Royalty)	Negotiation	Damages

Table 2. The Proposed View of Patent Damages

Compared to the current state of patent damages, the proposed scheme expands damages from a relatively simply 2x1 matrix to a 3x2 matrix. As to patentees, rather than today's binary separation between manufacturers and everyone else, the proper understanding of patent damages divides patentees into three types. First, the most mature patentees are those that are actively practicing their invention through ex ante transfer of the invention. They are either

¹⁶ Id.

¹⁷ Seymour v. McCormick, 57 U.S. 480, 489 (1853).

manufacturers selling artifacts that embody the invention (and are thus granting an implied license of use with the sale) or they are selling an ex ante license for the use of the invention directly. This practicing group is generally able to claim either lost profits or established royalties. As shown in Table 2, patent damages for these patentees do not depend on

Table 2, patent damages for these patentees do not depend on the status of the infringer. Reasonable royalties are theoretically available as a minimum floor for these patentees but if they truly are engaged in widespread practice of the patent then they should be able to satisfy the more stringent evidentiary burdens required to prove lost profits or an established royalty.

The second group of patentees are those that are working toward innovating and are beginning to undertake efforts to commercialize. As will be argued below, the case law that developed into reasonable royalties was built to afford this middle group of patentees compensation for infringement. Under the strict evidentiary standards of lost profits or established royalty law, this group of patentees could not prove the amount of damages even though courts generally agreed that infringement did cause pecuniary harm. Reasonable royalties developed to provide some estimation of that pecuniary loss for these patentees.

The last group includes those that have engaged in no efforts to commercialize. Under today's understanding of patent damages, substantial reasonable royalties extend equally to patentees that are working toward practicing as well as to patentees who have undertaken no efforts to practice. The main thrust of this article is to argue that this is incorrect. Properly understood, a reasonable royalty aims to compensate for actual damages to the patentee and as such actual damages differ radically between a patentee that has expended efforts to commercialize versus a patentee that has done nothing. For a patentee without efforts to commercialize, infringement by independent inventors causes no compensable harm. That patentee cannot prove any legally cognizable harm in fact and though the court "shall" grant "in no event less than a reasonable royalty," for this scenario, that reasonable royalty is not more than nominal damages.¹⁸

 $^{^{18}}$ As will be explained below, the law has always treated copyists differently – and for good reason. In a sense, though a patentee has yet to expend any efforts to commercialize, infringement by a copyist has generally been treated as though the patentee had already expended some

A comparison between Table 1 and 2 reveals a substantive difference only in one particular scenario: a nonpracticed patent asserted against an independent inventor. Despite that seemingly small change, its importance should not be underestimated. Independent inventors are the targets of nine out of ten patent lawsuits¹⁹ and today nearly half of all patent lawsuits involve patent that are not being actively practiced. In other words, if nominal damages were to be recognized as the maximum reasonable damages award for infringement of an unpracticed patent by an independent inventor, then the financial incentive that is driving most of today's troll lawsuits would be greatly reduced.

Patent law is, for the most part, an entirely statutory creature and this is especially true for patent damages. The current damages statute reads as follows:

> Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer \dots^{20}

And most importantly for this article, what exactly does it mean for a court to award "in no event less than a reasonable royalty"? The two tables above reveal two distinct ways to view reasonable royalties. Which statutory interpretation is correct?

Support for today's understanding of reasonable royalties begins with the statute itself. The statute mandates that a court award "in no event less than a reasonable royalty."²¹ Clearly, Congress has mandated that a damages award cannot be less than a reasonable royalty. And, as explained above, modern patent law understands a reasonable royalty to be the amount an infringer would have paid the patentee in a hypothetical negotiation for its infringing use of the invention. That understanding is supported by nearly 150 years of case law tracing support back to the Supreme Court's decision in Suffolk v. Hayden.²² Suffolk is generally seen as the case that gave birth to the concept of reasonable

efforts to commercialize.

 ¹⁹ See Lemely & Cotropia, Copying in Patent Law
²⁰ 35 U.S.C. 284

²¹ *Id*.

²² Suffolk v. Hayden, 70 U.S. 315, 319 (1865)

royalties that now appears explicitly in the damages statute. In that case, the court reviewed a damages award to a patentee who could not satisfy the more stringent requirements of lost profits damages. The Court approved of the lower court's decision to look to "generalized evidence" (beyond those usually used for lost profits) to establish the damages. In particular the Court noted that "what evidence could be more appropriate and pertinent than that of the utility and advantage of the invention over the old modes or devices that had been used for working out similar results?"²³ The Court concluded that with such "knowledge of these benefits" a jury "may" be able to assess damages and the loss to the patentee.

Notably the Court did not emphasize efforts to commercialize as a necessary element for damages nor did it even mention them as one of the "appropriate and pertinent" factors to consider. Instead it emphasized that there was "no established patent or license fee in the case."²⁴

That case is today interpreted as supporting the notion that reasonable royalties are not constrained by the patentee's own efforts to commercialize the patented invention. The creation of reasonable royalties is seen as signaling a significant break with the existing damages of established royalty or lost profits. Both lost profits and established royalties required commercialization by the patentee. Reasonable royalties is seen as dispensing with that requirement and creates instead a minimum substantial floor for all patentees. As understood today, when a court is mandated to award "not less than a reasonable royalty," that command is understood as ensuring that a patentee, at minimum, receives compensation equal to "the utility and advantage of the invention."²⁵ Efforts to commercialize may well still be part of lost profits and established royalties damages, but they are not necessary elements for reasonable royalties.

The above arguments in support of the current view of reasonable royalties do seem straightforward and convincing. Indeed they are so straightforward that it is largely accepted as correct. But what if this straightforward understanding is wrong? This article takes that position.

 $^{^{23}}$ *Id.* at

 $^{^{24}}$ Id.

 $^{^{25}}$ Id at

The mistake is the misinterpretation of what it means to award at minimum a reasonable royalty. As argued below, the judicial creation of reasonable royalties did signal a break with the stringent confines of established royalties and lost profits. The disagreement centers on exactly the degree of and type of break with the past those cases were meant to represent. A more careful reading of the early case law reveals that a reasonable royalty did not remove efforts to commercialize as a necessary element for substantial patent When courts created the reasonable royalty damages. concept, the existing avenues for patent damages, lost profits and established royalties, were (and in fact still are) quite stringent. They were only available to patentees that were already successful innovators. They were available for those patentees that were already transferring technology (via product sales or licensing) to those that could use it.

If that were the only route to damages then patentees that were just gearing up to commercialize and innovate could not be compensated. Despite having expended considerable efforts toward innovating and commercializing, there was no substantial remedy at law for past infringement. Specifically for those patentees the courts recognized, correctly, that infringement causes actual harm. And reasonable royalties was created to help them. It did liberalize the then-too-strict rules for patentees who had not undertaken some efforts to commercialize.

As detailed below, the cases like *Suffolk v. Hayden* and the cases that followed are all of two specific types. Though unable to establish lost profits or established royalties, the patentees were either in early stages of commercializing their inventions or the infringer outright copied the invention. Noticeably absent is any case awarding damages at law to a patentee who has undertaken no efforts to commercialize. It is not until the 1970's that cases began to explicitly rationalize such an award and began granting of substantial reasonable royalties to all patentees, independent of their efforts to commercialize. That change in our understanding of reasonable royalties was one of the critical factors that have made the patent landscape ripe for patent trolls.

In addition to a divide about statutory interpretation, this debate about understanding the meaning of a "reasonable royalty" also implicates quite fundamental policies about the very purpose of the patent system.²⁶ Patent damages, as a type of tort, have been guided by the question "had the Infringer not infringed, what would [the patentee] have made?"²⁷ The answer to that question is contingent on the world that we envision the patentee as inhabiting "but for" the infringement. And that world depends on what world we believe that the patent system aims to create. There are two differing views on the patent system, one invention reward focused and one innovation focused and they lead to differing views on patent damages.

The current broad view of reasonable royalty is premised on a reward theory of patents. In that theory, which is still the predominate theory of patents today, the purpose of the patent system is to cure an underproduction problem. For public goods like inventions, there is a lack of private incentives to create them. The patent system is seen as fixing that underproduction problem by rewarding those that invent. And though in theory that reward could come in the form of a prize, the patent system has chosen to meter that reward via a grant of valuable rights of exclusion. A patent is thus seen as a reward funded by a tax directed at those that infringe the That view has a direct impact on patent patent rights. damages. When answering "what would the patentee have made but for the infringement," we ask what part of the patent 'reward' has been left unpaid by the infringer. In that view, an unlicensed use by even an innocent, independent inventor is a form of tax evasion and constitutes a compensable harm to the inventor. A patent infringement lawsuit is thus seen as collection of an unpaid tax. In this view, it makes perfect sense to expect substantial damages in every case of patent infringement. In that view, the grant of the patent alone qualifies the patentee for a substantial reward and accordingly patent damages, including reasonable royalties, aim to provide that reward to every patentee.

In addition to the historical problems with this broad view of reasonable royalties, there are significant theoretical problems with this reward based view of patents.²⁸ As I have

²⁶ In other areas of law similar fundamental debates can be seen. In tort and antitrust, the debates about proximate harm and antitrust injury respectively have a similar feel. And both views on reasonable royalties are tied to differing views on the purpose of the patent system.

²⁷ Aro II at 507.

²⁸ See Oskar Liivak, Maturing Patent Theory, Tul L Rev. ; Establishing an Island of Patent Sanity, Brook. L. Rev..

argued elsewhere, it creates a system based on exclusion where some are left without the invention. As a non-rival good, preventing use societies use of a productive invention appears inefficient. It appears impossible to establish that the benefits of the reward outweigh the costs and, just as problematic, it appears that it is impossible to prove that they don't. In the sciences, such unverifiable explanations should not even by called theories at all. Indeed, as Jamie Boyle has described it, the dominant reward theory is based more on faith and mysticism than anything more scientific.

On the other side of the debate, supporting the narrower understanding of reasonable royalties, is an alternate view of the patent system that focuses more on commercialization and innovation as the ultimate goal of the patent system. In this view, rather than focus only on the creation of inventions, the purpose of the patent system is to foster efficient creation of inventions *and* efficient distribution of those inventions to those that can use them. In this view, the aim of the patent system is to coordinate both inventive *and* innovative activity.

As innovation, the active use of productive technological solutions by society, is the ultimate goal, a patent is no longer seen as an end in its self. A patent is not a reward funded by a tax on those that use the invention. Rather, an issued patent can be thought of as simply certifying that the inventor created a technological solution that is new and not obvious. Such patentable inventions are exactly those technological creations that society thinks should be created and offered to society.

Once that patent is issued, the patent system now expects that patentee to supply their solution to society. The exclusionary rights granted by the patent need not exclude rather they simply protect the patentee's position as the exclusive supplier of the patented technology to society. When guided by this vision of the patent system, patentees are expected to be actively offering their inventions to technological users and it is through those activities (whether sales of products or grants of licenses) that a patentee generates revenue. In that world, the answer to the question "what would the patentee have made but for the infringement" is different than in a reward world. If the patentee is actively supplying the invention to users, then "but for the infringement" we can sensibly talk about pecuniary losses to the patentee. Infringement by someone that has been selling the invention may well be displacing sales that the patentee would have made. That loss should be compensated by patent damages. Even simple use by an infringer could be a lost sale and similarly compensated.

Yet, in this world view, if the patentee undertakes no commercialization and just sits on the patent – earning no revenue from their position as the exclusive supplier of the patented invention – then "but for the infringement" the patentee's position would not be any different. They cannot show any pecuniary harm from the infringement. In this view, infringement causes the non-practicing patentee no compensable harm and accordingly nominal damages are reasonable.

Not only is there historical support for such a view of patent damages, but this innovation focused theory has substantial benefits over the reward based theory. First, as a theory it has the potential to be verified. Second, the emphasis of this system is not on excluding others per se, rather the emphasis is exclusive supply to others. And in a sense it is a story about inclusion - those who want to use the patented invention should be able to use it but they will need to pay for access. The purpose of the exclusive rights is to coordinate and channel societies' demand for that use through the patentee.

The rest of this article expands on this discussion. It begins with the current understanding of reasonable royalties. It examines the doctrinal and policy support for this view. It also concludes by showing how that view enables the current patent troll eco-system. Disagreeing with the understanding of reasonable royalties, the article reviews the history of reasonable royalties and shows that reasonable royalties was created to allow substantial damages for patentees who are engaged in some early commercialization activities but still fall short of qualifying for lost profits or established royalties. Importantly the case law that developed reasonable royalty not only cannot be used to support a complete elimination of efforts to commercialize on the part of the patentee but rather that foundational caselaw instead is in tension with today's broad understanding reasonable royalties.

I. MODERN REASONABLE ROYALTY AND THE SUBSTANTIAL FLOOR

This section outlines the modern understanding of

patent damages via reasonable royalties. Most importantly, today, infringement of a valid, enforceable patent is alone enough to guarantee the patentee a substantial damages award. Efforts to commercialize by the patentee are not necessary for such an award. This section details the doctrinal and policy based support for that understanding of reasonable royalties.

Today's patent statute instructs the courts that "[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer."²⁹ As outlined above in Table 1, the modern understanding of patent damages provides two routes for patentees: lost profits or reasonable royalty. For those patentees that manufacture and sell the invention, they can claim damages computed via lost profits. If on account of infringement, the patentee can prove that it lost sales and therefore profits, the patentee can be awarded those lost profits. Patentees that do not sell their patented invention are generally not able claim lost profits. For patentees that cannot avail themselves of lost profits, the statute provides a minimum of a reasonable royalty. A reasonable royalty is the "floor" below which patent damages cannot fall.³⁰ But what exactly is it?

For the purposes of this article, and indeed for the issue of patent assertion ecosystem, one critical detail about modern reasonable royalties should be emphasized. Today the award of a substantial reasonable royalty is largely automatic; it does not require the patentee to have undertaken any efforts to commercialize their patented invention. Rather, a substantial reasonable royalty award is awarded as long as the patent has been found to be valid, enforceable and infringed. In other words, whenever a valid, enforceable patent is infringed, then the patent owner can sue and know that they "shall" receive a fraction of the value derived from the use of the patented invention even if the patentee never risked any resources to develop or commercialize that use.³¹

²⁹ 35 USC 283.

³⁰ Bandag v. Gerrard, 704 F.2d 1578, 1583 (Fed. Cir. 1983).

³¹ It should be noted that a reasonable royalty as currently understood can be a nominal award where the hypothetical negotiation would return only a nominal valuation for the patented invention. The core of this article aims to show that a reasonable royalty cannot be more than a nominal award in a larger subset of fact patterns particularly when the

In his influential treatise³² Donald Chisum outlines this modern understanding of reasonable royalties. He notes that in considering "an award of a reasonable royalty, one should distinguish between (1) the existence of damage to a patentee which will support any award and (2) the evidentiary support for a particular rate or quantity as a reasonable royalty."³³ He follows by declaring that "[a]s to the first issue, no specific proof should be required. *The premise of the reasonable royalty measure is that a holder of a valid and infringed patent has inherently suffered legal damage at least to the extent of a lost license royalty opportunity.*"³⁴

In supporting that proposition Chisum highlights a pivotal case, the Seventh Circuit's opinion in Zegers v. Zegers. In arguing that nominal damages was the maximum allowable damages award, the defendant "argue[d] that plaintiff may never recover a reasonable royalty without proving that he was in fact damages by the infringement."³⁵ In other words, the plaintiff had not shown the existence of any damage in fact. In denying the award of only nominal damages, the Seventh Circuit disagreed with the defendant stated that

deprivation of royalty income which a patentee is entitled to receive from one who practices his invention constitutes a form of damages compensable under § 284 of the Patent Code. If the patentee is a manufacturer, he may prove his damages by evidence of lost sales and profits. But if such proof is inadequate, or if he does not himself sell the product, he may nevertheless be injured by the unlicensed practice of his invention. The reasonable royalty which he might lawfully have collected from the infringer if he had been a licensee may then be the measure of damages.³⁶

patentee has not undertaken any efforts to commercialize.

³² See Rob Merges, On Chisum

³³ Chisum, 1-20 20.07

³⁴ *Id*.

³⁵ Zegers v. Zegers, Inc., 458 F.2d 726, 729, 1972 U.S. App. LEXIS 10641, 8, 173 U.S.P.Q. (BNA) 385 (7th Cir. Ill. 1972)

³⁶ Zegers v. Zegers, Inc., 458 F.2d 726, 730, 1972 U.S. App. LEXIS 10641, 10, 173 U.S.P.Q. (BNA) 385 (7th Cir. Ill. 1972)

That 1972 Seventh Circuit opinion was ultimately cited by Federal Circuit (via the Chisum treatise) in the 1990 by Judge Markey in Lindemann Maschinenfabrik GmBH v. American Hoist & Derrick Co. That case agreed with the policy arguments made in Zegers that compensable damage occurs whenever there is infringement of a valid patent. "[T]he fact of infringement establishes the fact of damage because the patentee's right to exclude has been violated."³⁷ The Federal Circuit went on to reinforce that "the statute obviates the need to show the fact of damage when infringement is admitted or proven...."38 And today that is still our understanding of reasonable royalties. In recent Apple v. Motorola case, the Federal Circuit reiterated that "[w]hen a patentee shows infringement, a presumption arises that the patentee is entitled to some form of damages. The Federal Circuit has explained that this presumption arises from the statute once infringement is admitted or proven."³⁹

Thus, once a patent is infringed, substantial damage and the fact of harm is assumed, and the patentee only needs to "prove the amount of harm."⁴⁰ In modern patent law that proof of the amount of harm is usually resolved by considering the so called Georgia Pacific factors, so named for the case that first described them.⁴¹ Though there are multiple Georgia Pacific factors the core is to determine "the amount that would have been set in a hypothetical negotiation between a willing patent owner and a willing potential user as of the date when the infringement began."⁴²

In short, patent law now expects that a reasonable royalty will be more than a nominal award (and will be granted once infringement is proved) *even where the patentee has not commercialized the patented invention.*⁴³ Now, it is true that the modern understanding of reasonable royalty

31-Jul-14]

³⁷ Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., Harris Press & Shear Div. 895 F.2d 1403, 1406 (Fed. Cir. 1990).

³⁸ Lindemann, at 1407.

³⁹ Apple Inc. v. Motorola, Inc., 2014 U.S. App. LEXIS 7757, 94 (Fed. Cir. Apr. 25, 2014)(citing Annotated Patent Digest, § 30:7).

⁴⁰ *Id.* at 1406; *see also1-20* Chisum 20.07 note 10.

⁴¹ 318 F. Supp. 1116 (S.D.N.Y. 1970).

⁴² Chisum 20.07

⁴³ Amy Landers, 46 Santa Clara L Rev 307, 324 (2006)("A patentee qualifies for damages adequate to compensate for infringement without exploiting its patent."); King Instruments Corp. v. Perego, 65 F.3d 941, 949 (Fed. Cir. 1995).

does still allow for very small, nominal, or even zero damages.⁴⁴ But those cases are reserved for instances where the protected invention has no value and the hypothetical negotiation returns that small or nominal value. In those cases, the lack of commercializing activity is not what leads to the nominal award.

This understanding of patent damages is critically important for non-practicing patentees. Such patentees, especially as lost profits are generally unavailable for them, must rely on a reasonable royalty for their measure of damages. And luckily for them a reasonable royalty today is often going to award a substantial amount. As long as that patented invention (though never practiced by the patentee) has been independently invented and utilized by another then reasonably royalties will award the patentee much of that utilized value.

As this article argues, this is particularly perverse result where innovation is the goal. In the example given, a true (but not first) inventor who goes on the undertake (and succeed) at the hard, risky undertaking of innovation I being heavily taxed by another who can only claim to be the true and first inventor without any claim to undertaking any innovative activities. Under our current system of patent damages, it is better to just be a inventor and patentee than to be an inventor and innovator. (And indeed the way damages work) it is better to take chances with reasonable royalties than to innovate and set a particular established royalty. In a significant way, innovation today is for suckers. With incentives set so improperly who exactly is willing to innovate rather than just simply patent?

Despite this unfortunate dynamic described above, the modern understanding of reasonable royalty certainly does have its supporters. First, there does appear to be doctrinal support for this view tracing support back to the Supreme Court's decision in Suffolk v. Hayden.⁴⁵ Suffolk is generally seen as the case that gave birth to the concept of reasonable royalties that now appears explicitly in the damages statute. In that case, the court reviewed a damages award to a

⁴⁴ Love, "Nominal Reasonable Royalties for Patent Infringement," 75 U. Chi. L. Rev. 1749 (2008) - focuses on nominal damages where there is a easily adopted competitor such that market value of patented invention is zero as in Grain Processing. Note argues that courts need to apply it more. ⁴⁵ Suffolk v. Hayden, 70 U.S. 315, 319 (1865)

patentee who could not satisfy the more stringent requirements of lost profits damages. The Court approved of the lower court's decision to look to "generalized evidence" (beyond those usually used for lost profits) to establish the damages. In particular the Court noted that "what evidence could be more appropriate and pertinent than that of the utility and advantage of the invention over the old modes or devices that had been used for working out similar results?"⁴⁶ The Court concluded that with such "knowledge of these benefits" a jury "may" be able to assess damages and the loss to the patentee.

Notably the Court did not emphasize efforts to commercialize as a necessary element for damages nor did it even mention them as one of the "appropriate and pertinent" factors to consider. Instead it emphasized that there was "no established patent or license fee in the case."⁴⁷

That case is today interpreted as supporting the interpretation that reasonable royalties are not constrained by the patentee's own efforts to commercialize the patented invention. The creation of reasonable royalties is seen as signaling a significant break with the existing damages of established royalty or lost profits. Both lost profits and established royalties required commercialization by the patentee. Reasonable royalties is seen as dispensing with that requirement and creates instead a minimum substantial floor for all patentees. As understood today, when a court is mandated to award "not less than a reasonable royalty," that command is understood as ensuring that a patentee, at minimum, receives compensation equal to "the utility and advantage of the invention."48 Efforts to commercialize may well still be part of lost profits and established royalties damages, but they are not necessary elements for reasonable royalties.

Furthermore, this view of reasonable royalties also coincides with the dominant theory of patents. Many see the patent system as a reward system that aims to address an underproduction problem. If the law did nothing, then those that did produce useful information (like inventions) would be unable to recoup their costs as others would the simply copy and utilize the information themselves. In short, in a

⁴⁶ *Id.* at

⁴⁷ *Id*.

 $^{^{48}}$ Id at

free market economy the production of inventions is not thought to be a viable business. And though we have strong evidence that the production of new ideas like inventions is very important for economic growth, it is reasonable to conclude that without some type of government intervention, society would under-produce this important resource.

To overcome this underproduction, we 'artificially' make the business of inventing a profitable. In theory we could imagine a number of ways to administer this reward for example through grants, prizes or exclusive rights.⁴⁹ For many, the patent system is the solution to this underproduction problem that utilizes exclusive rights as the reward for inventing.

Under that theory, policy makers decide how big of a reward to grant patentees so that the optimal amount of inventive activity takes place (thus solving the underproduction problem). One noted advantage of the patent system over alternative prize or grant schemes is the thought that by granting exclusive rights that are a function of the information disclosed then the patent reward automatically modulates the reward based on the social importance of the patentee's contribution.

If the exclusive rights cover a technological space that is heavily utilized during the patent term, then the patentee can extract substantial rents from those users. In contrast, if no one is making or using anything within the exclusionary grant, then that patent is generally worth little. This is all by design and it aims to tie the reward to the contribution.

In a sense these cases focus on the patent grant itself as a reward – a reward calibrated through the right to exclude. If during the term of the patent no one makes, uses, or sells the patented invention, then there is no one to tax via the patent exclusion and patent reward is zero. But where others do make, use, and sell (even where they do so wholly independently from the patentee) then the patent is seen as allowing the patentee to collect tribute from those users. In that reward based patent world view, then infringement is akin to tax evasion and infringement alone causes pecuniary harm.

Importantly, this view of patents directly impacts one's view of patent damages. If the patent system is an artificial government intervention that guarantees a reward to

⁴⁹ See Wright. And see new stuff on alternatives rewards.

patentees, then patent damages should *not* depend on the patentee's activities to commercialize or whether the defendant copied or instead independently came up with the invention. The reward is for the disclosure of a patentable invention. In all cases, this particular view of patents sees all infringers as those that need to pay the patentee. In other words, all infringers – independent of whether the patentee practiced the patent – have identified by Congress as the ones who should contribute to the patentee's reward.

The Federal Circuit has justified just such a broad understanding of patent damages based on such a theory. In 1990 Judge Markey argued that compensable damage occurs whenever there is infringement of a valid patent as it is "the fact of infringement establishes the fact of damage because the patentee's right to exclude has been violated."⁵⁰ In other words the patent grant is specifically intended to exclude others so that the patentee can extract a rent and that shouldn't depend on the activities of the patentee. As repeated later by Judge Rader, "[a] patentee qualifies for damages adequate to compensate for infringement without exploiting its patent... for the patentee's right to exclude others from making, using or selling the invention."⁵¹

The above arguments in support of the current view of reasonable royalties do seem straightforward and convincing. Indeed they are so straightforward that it is largely accepted as correct. But what if this straightforward understanding is wrong? This article takes that position.

II. NOMINAL IS REASONABLE FOR UNPRACTICED PATENTS

As explained in the previous section, the current understanding of patent damages assumes that infringement causes cognizable harm. Efforts to commercialize the patented invention are not necessary for substantial damages. As a doctrinal matter that position is supported by reflexively citing the statutory command that a court shall award "in no event be less than a reasonable royalty."⁵² And since it is assumed that a reasonable royalty is a substantial figure

⁵⁰ Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., Harris Press & Shear Div. 895 F.2d 1403, 1406 (Fed. Cir. 1990).

⁵¹ King Instruments, 65 F.3d at 949; see also Rite-Hite v. Kelley Co., 56 F.3d 1538, 1548 (Fed. Cir. 1995); see also Minco, Inc. v. Combustion Eng'g, Inc., 95 F.3d 1109, 1118 (Fed. Cir. 1996).

⁵² 35 U.S.C. 284.

based on the value of the patented technology, most see the provision as guaranteeing a substantial floor for patent damages. And as a normative matter that position is supported by emphasis on patents as exclusionary rewards. This article disagrees with both the doctrinal and policy understanding. Properly understood, both as a matter of patent history and patent policy, patent damages including reasonable royalties must consider the patentee's commercialization activities. This article argues that when the patentee has taken no steps to commercialize, infringement causes no harm and nominal damages are reasonable. This section takes up the historical side of that argument while the next section considers the policy issues.

This section reviews the history of patent damages and finds, rather surprisingly, that efforts to commercialize, even for reasonable royalties, have always been and should be a necessary element in establishing non-trivial patent damages.

The reasonable royalties first appeared in the patent statute in 1922 evolved to its current form with modifications in 1947 and 1952. Importantly, the 1922 statutory introduction of reasonable royalties was understood as codifying the previous seventy years of judicial development of reasonable royalties.⁵³ As a result the proper statutory interpretation of reasonable royalties today requires an appreciation of patent damages during that whole developmental period.

The following historical survey yields a number of important points. First, prior to 1859, -- before reasonable royalties appeared in the case law much less the statute -patent damages were limited two specific circumstances: lost profits or an established royalty. In either case, to be awarded more than nominal damages, the patentee had to practice the claimed invention via ex ante licensing or actual product sales. During that period there is no doubt that infringement of an unpracticed patent was compensated by no more than nominal damages. The damages statute focused on actual innovation by the patentee and on harm caused to that agenda by the infringer.

⁵³ Note, *Recovery in Patent Infringement Suits*, 60 COLUM. L. REV. 840, 847 (1960) (citing See, e.g., Wallace & Tiernan Co. v. City of Syracuse, 45 F.2d 693 (2d Cir. 1930); Mathey v. United Shoe Mach. Corp., 54 F. Supp. 694 (D. Mass. 1944) ; Austral Sales Corp. v. Jamestown Metal Equip. Co., 41 F. Supp. 508 (W.D.N.Y. 1941). See also Fink, supra note 23, at 823; Note, 72 HARv. L. REV. 328, 344 (1958))

And though from 1859 through till today, there have been changes to patent damages, there are no changes that have changed that basic rule. Simply put, no case or statutory amendment exists that supports the current broad understanding of reasonable royalties. Rather the foundational cases for reasonable royalties consist of two fact patterns. Either the patentee had taken some steps toward commercialization or the infringer had outright copied the patented invention. There are no cases (until at least the 1970s) that hold that patentees who have expended no efforts to commercialize should be compensated by substantial damages awards when asserting their patents against independent Today's inventors. overly generous understanding of reasonable royalties, and the resulting substantial damages awards in today's patent troll lawsuits, are simply not supported.

Reasonable royalties did develop to enable substantial damages for some patentees but it did not remove patent laws focus on innovation. Beginning in 1859, the courts did begin developing reasonable royalties because the existing law on patent damages was too limiting. Those cases enabled substantial compensation for patentees that were engaged in efforts to commercialize their invention but who could not yet prove lost profits or an established royalty. Though the law on reasonable royalty that developed certainly liberalized the grant of patent damages, importantly there is no case from that formative period that granted substantial damages for an unpracticed patent. As reasonable royalty was codified into the statute that understanding from case law was brought into the statute. And until the 1970s, the subsequent caselaw only reconfirms that substantial damages, even when styled as a reasonable royalty, are not available for an unpracticed patent. The following more fully explores that history.

A. Patent Damages at Law: 1790-1853

Prior to 1922, the patent statute made no mention of reasonable royalties. In fact the first glimpses of the concept appeared in the courts around 1865 as a response to the then existing damages statute.

The very first patent damages statute gave little direction to courts. That vague standard was replaced a short three years later with more detail. The act of 1793 instructed that

"the infringer should forfeit and pay to the patentee a sum equal to three times the price for which the patentee has usually sold or licensed to other persons the use of said invention." This early damages statute required innovation as a prerequisite for any substantial damage award. There was no compensable injury to the patentee unless the patentee was already selling or licensing the invention. Furthermore note that the "usual[] ... price" for that sale or license was the focus of the inquiry and the actual damages award was triple that usual price. By 1800, Congress again amended the damages statute by removing the reference to the "usual price" and instead awarding "three times the actual damage." And in 1836 Congress removed the automatic trebling of the reward. It commanded courts to grant only "actual damages" and it left new the power to treble that award to the court's discretion.

This statutory history was reviewed by the Supreme Court in the case Seymour v. McCormick in 1853.⁵⁴ The Court outlined the rationales behind both the move from focusing on the usual selling price to the more general actual damages as well as the change from mandatory treble damages to the discretionary model.

As relayed by the Court in Seymour, "as experience began to show that some inventions or discoveries had their chief value in a monopoly of use by the inventor, and not in a sale of licenses, the value of licenses could not be made a universal rule, as a measure of damages."⁵⁵ Furthermore the Court explained why Congress had removed the mandatory trebling of damages. The Court explained that "[e]xperience had shown the very great injustice of a horizontal rule equally affecting all cases without regard to their peculiar merits."⁵⁶ The Congress aimed to "obviate this injustice"⁵⁷ and amended the statute. The Supreme Court in Seymour lauded this liberalization from focusing exclusively on an established royalty to the more general standard of actual damages. They noted that "[i]t must be apparent to the most superficial observer of the immense variety of patents issued every day, that there cannot, in the nature of things, be any one rule of damages which will equally apply to all cases."58

⁵⁴ 57 U.S. 480 (1853).

⁵⁵ Id. at 488

⁵⁶ *Id*.

⁵⁷ Id.

⁵⁸ *Id*.

But the Court did not see that liberalization of patent damages as being without limits. The Court made clear that the court can award "only such damages as have actually been proved to have been sustained. ... Actual damages must be actually proven, and cannot be assumed as a legal inference from any facts which amount not to actual proof of the fact. ... The question is not what speculatively he may have lost, but what he did lose."⁵⁹ Ultimately in Seymour the Court reversed the lower courts "enormous and ruinous verdict" for the patentee and instead found that the only actual damage amounted to the "refusal to pay the usual license price."⁶⁰

B. Emergence of Reasonable Royalties: 1854-1895

As explained in the previous section, patent damages initially granted substantial damages only when the patentee was actively commercializing the invention. Two modes of such innovative activity where generally recognized. Either the patentee was licensing the invention openly and thus the infringement caused harm to this licensing agenda or the invention was being manufactured and sold by the patentee and thus the infringement caused harm in the form of lost profits to this exclusive product sales agenda. The patentee had the burden to establish one of these two beneficial ways of getting the invention into the hands of the public and the patentee had to provide particular evidence to quantify the harm caused by the infringement. The courts required "substantial proof of causation" and if the patentee could not satisfy that exacting standard, they would receive nominal damages.⁶¹ And indeed nominal damages were awarded with some regularity.⁶²

In a number of cases, courts found this damages rule too harsh and the courts sought ways to rectify this "inequity."⁶³

⁵⁹ *Id.* at 490.

⁶⁰ *Id.* at 491.

⁶¹ Chisum, 20.02

⁶² See Rude v. Westcott, 130 U.S. 152 (1888); Garretson v. Clark, 111 U.S.

^{120 (1884) ;} Black v. Thorne, 111 U.S. 122 (1884); see also Chisum, 20.02.

⁶³ Note, Recovery in Patent Infringement Suits, 60 COLUM. L. REV. 840, 847 (1960)(explaining that "[t]he courts at first restricted recovery in these cases to a nominal award, but the inequity of depriving a patent owner of compensation for the misappropriation of his exclusive rights

One of the most important early such cases was the 1865 case of Suffolk v. Hayden. This was a case where the exacting standard for either lost profits or established royalty could not be proved. Yet the Court did not feel comfortable to simply award nominal damages. The Court noted that

> This question of damages, under the rule given in the statute, is always attended with difficulty and embarrassment both to the court and jury. There being no established patent or license fee in the case, in order to get at a fair measure of damages, or even an approximation to it, general evidence must necessarily be resorted to. And what evidence could be more appropriate and pertinent than that of the utility and advantage of the invention over the old modes or devices that had been used for working out similar results? With a knowledge of these benefits to the persons who have used the invention, and the extent of the use by the infringer, a jury will be in possession of material and controlling facts that may enable them, in the exercise of a sound judgment, to ascertain the damages, or, in other words, the loss to the patentee or owner, by the piracy, instead of the purchase of the use of the invention.⁶⁴

A few points from Hayden should be emphasized. First, the Court puts emphasis of "generalized evidence" in contrast to the specific evidence of either lost profits or established royalty that previously had been the focus of patent damages. In other words, substantial patent damages are no longer limited to just those patentees that could prove a wellsupported amount of lost profits or lost royalties. Second, the Court gives some idea of what constitutes this new concept of generalized evidence. There was "no established patent or license fee in the case" and thus this generalized evidence is meant to reach cases beyond those traditional cases types of lost profits or lost royalties. Furthermore, the Court put

was remedied by the judicial development of an award based on a reasonable royalty.")

⁶⁴ Suffolk v. Hayden (1865)

special emphasis on "utility and advantage of the invention over old modes" without mentioning any other factors.

As detailed above these selections from Suffolk are heavily relied upon to show that reasonable royalties should focus only on the value of the technology and those selections are also used to support the notion that no commercialization need take place to receive substantial reasonable royalties. On closer inspection Suffolk cannot be understood to support that a broad proposition. Though he had not yet fully commercialized his invention, and therefore unable to qualify for traditional damages via lost profits or established royalties, Hayden did undertake some steps to commercialize his patent. In the district court, the judge summarized the evidence relating to patent damages noting that "[t]here is some evidence ... of the use, by [third parties] of [Hayden's] machine..., by his consent, under particular circumstances."65 Interestingly that "compensation for the use of it, as a license" was not "satisfactory to Mr. Hayden" and "is not taken as any price he fixed [as] fair compensation to use his patent."66 In other words, though some commercialization occurred, Hayden did not want the amounts paid for those early licenses to constitute evidence of an established royalty (presumably because the licensing royalty was quite low).

In short, Suffolk v. Hayden cannot be seen as holding that, absent any effort to commercialize, a patentee is nonetheless entitled to substantial patent damages. In fact, rather than dropping any consideration of commercialization efforts and innnovation, Suffolk v. Hayden should be understood instead as providing needed emphasis on the realities of commercialization. Early on in the commercialization process, all patentees must convince users to adopt their new, nonobvious technology. Licenses made to those early adopters may not accurately reflect the value of the technology once its value has been proven to users. As a result, though they evidence efforts to commercialize, those early licensing agreements may need to be handle with care lest they too easily be used to prove an established royalty.

⁶⁵ Hayden v. Suffolk Mfg Co, 11 F. Cas. 900, 907 (C.C.D. Mass. 1862) aff'd sub nom. Suffolk Co. v. Hayden, 70 U.S. 315, 18 L. Ed. 76 (1865).

⁶⁶ Hayden v. Suffolk Mfg Co, 11 F. Cas. 900, 907 (C.C.D. Mass. 1862) aff'd sub nom. Suffolk Co. v. Hayden, 70 U.S. 315, 18 L. Ed. 76 (1865).

This concept was later included in Robinson's treatise as he warned against using as an established royalty "[a] fee of small amount temporarily adopted in order to introduce the invention, or to raise money under the pressure of necessity."67 Thus, though Hayden was a very important case that liberalized the too strict standards for patent damages, it did not go so far as to remove some commercialization as a necessary element of patent damages.⁶⁸

Undoubtedly patent law, rightfully in my opinion, was liberalizing its view on patent damages. The Court was enabling damage awards even where the strictures of established royalties or lost profits could not be satisfied. Yet the important question that remains, how far did this

⁶⁷ IV Robinson on Patents 329 (on the other side of the ledger Robinson also warned against payment made in settlement of litigation: "nor, on the other hand, does a large amount paid under compulsion by infringers in settlement for injuries inflicted by their wrongful acts; and evidence of either of these payments under emergency is inadmissible.")

⁶⁸Eight years later in Phillip v. Nock the Supreme Court echoed these ideas and again supported a damage award even where the traditional test for established royalty could not be satisfied. The Court stated that the patentee "will be entitled to an amount which will compensate him for the injury to which he has been subjected by the piracy." In arriving at their conclusion, the Court emphasized that the profit made by the defendant and that lost by the plaintiff are among the elements which the jury may consider."Philp v. Nock, 84 U.S. 460, 462, 21 L. Ed. 679 (1873). But as with Suffolk, the patentee was commercializing his invention. There was evidence in the case that "the royalty which the plaintiff received for the use of his patent was at the rate of \$2 per gross." Philp v. Nock, 84 U.S. 460, 21 L. Ed. 679 (1873).). Phillip v. Nock is also important in drawing a distinction between profits and actual damages. Amount saved or profits made by defendant can be evidence of actual damage but they are not themselves actual damage. The Court noted that "[n]o doubt, in the absence of satisfactory evidence of either class in the forum to which it is most appropriate, the other may be resorted to as one of the elements on which the damages or the compensation may be ascertained; but it cannot be admitted, as the prayer which was refused implies, that in an action at law the profits which the other party might have made is the primary or controlling measure of damages." In addition, Other cases from that era made a strong distinction between the remedy in equity, namely defendant's profits, and the remedy at law, actual damage to the plaintiff. See Burdell v. Denig, 92 U.S. 716, 720, 23 L. Ed. 764 (1875)("No doubt, in the absence of satisfactory evidence of either class in the forum to which it is most appropriate, the other may be resorted to as one of the elements on which the damages or the compensation may be ascertained; but it cannot be admitted, as the prayer which was refused implies, that in an action at law the profits which the other party might have made is the primary or controlling measure of damages.")

liberalization process go? In both cases, the patentee was still undertaking some efforts to commercialize even though the patentee's could not satisfy the standards of lost profits or established royalties. Importantly for this article and today's quite liberal view of reasonable royalties, these cases do not support the modern view.

Subsequent cases gave some clues to the outer limits of the damages liberalization started by Suffolk. In 1889 the Court decided Rude v. Westcott.⁶⁹ The patent in that case was found both valid and infringed.⁷⁰ The defendant had manufactured and sold 2000 drills that infringed the patent The plaintiff had "waived all claim for profits claims arising from manufacturing, use, and sale of the patented machines."⁷¹ Instead the patentee sought to prove an established royalty.⁷² The patentee put forth three licensing agreements to establish a royalty.⁷³ The Court (as well as the court below) rejected all of them. For example, one licensing agreement "was made in part under threat of suit."⁷⁴ The Court went on describing that such "a payment of any sum in settlement of a claim for an alleged infringement cannot be taken as a standard"⁷⁵ The Court went on to affirmatively state what types of licenses could count towards proving a quantifiable harm:

In order that a royalty may be accepted as a measure of damages against an infringer, who is a stranger to the license establishing it, it must be paid or secured before the infringement complained of; it must be paid by such a number of persons as to indicate a general acquiescence in its reasonableness by those who have occasion to use the invention, and it must be uniform at the places where the licenses are issued.⁷⁶

The licenses proffered by the patentee in Rude did not fit this

⁶⁹ Rude v. Westcott, 130 U.S. 152 (1889)

⁷⁰ *Id.* at 159.

 $^{^{71}}$ *Id.* at 163.

⁷² Id.

⁷³ Id.

⁷⁴ Id. at 164.

⁷⁶ *Id.* at 165.

bill and were rightfully rejected by the court below.⁷⁷ The court below remanded the case to the master to take more evidence. A number of witnesses testified. Witnesses for the patentee produced "estimates ... [that] were merely conjectural" ranging from three to six dollars per drill. In contrast the witnesses for defendant "stated that they did not consider them of any more utility than other seeding drills in use, and that they did not bring any greater price in the market."⁷⁸ The master concluded, "though by what process of reasoning is not perceived" that the correct award should be \$1.50 per drill. The court adjusted this award to effectively \$0.60 per drill "without stating the ground of its action."⁷⁹

The Supreme Court rejected the damages award. The Court rejected licensing evidence and the witness testimony as it "furnished no satisfactory basis for any damages, much less data which authorized the specific finding made as to the damages for each drill used."⁸⁰ The Court emphasized that the evidence provided no proof of harm at all and certainly no quantifiable proof of that harm. The Court emphasized the "settled rule of law … that actual, not speculative, damages must be shown, and by clear and definite proof, to warrant a recovery for the infringement of a patent."⁸¹ The Court concluded that "[n]o legal ground being shown for the recovery of specific damages…, the decree must be [r]eversed, and … remanded, with directions to enter a decree for the complainants for nominal damages."⁸²

In today's debates surrounding patent trolls, Rude v. Westcott deserves much more attention than it currently receives. The case was heard at time when the Court was liberalizing patent damages yet in *Rude* the Court drew a sharp line. Though early efforts to commercialize like in *Suffolk* or *Phillip* could be enough to establish the fact of actual, substantial damages, the licensing activities in *Rude* did not establish any substantial damage.

⁷⁷ *Id.* at 166 ("the sums paid in the instances mentioned, upon which the master relied, cannot be regarded as evidence of the value to the defendants of the invention patented. The court below so treated them, and held that without further evidence, the complainants would be entitled only to nominal damages.")

⁷⁸ *Id.* at 166.

⁷⁹ *Id*.

 $^{^{80}}$ Id.

⁸¹ Id.

 $^{^{82}}$ Id.

Most importantly for the troll debate, the Court is making the distinction that is at the heart of the difference between ex ante and ex post licensing. In modern times this distinction has been introduced by the FTC in its 2005 report. Ex ante licensing involves the transfer of technology in exchange for payment. There is indeed at license to use the technology that is granted but the heart of the transaction is money in exchange for technological know-how. Ex post licensing is different and is at the heart of most patent troll licensing A license is granted but no technology is programs. transferred usually because the licensee has already independently invented the technology themselves. The transaction involves money in exchange for a promise not to sue. That ex ante licensing that is at the heart of most patent troll licensing programs was rejected by the Court Rude v. Westcott. In other words, the lack of an expost licensing payment by a defendant provides "[n]o legal ground being shown for the recovery of specific damages" and with more require "a decree for the complainants for nominal damages."83

Importantly, *Rude v. Westcott* underscores that innovation is a fundamental goal of patent policy. Damages compensating patentees via lost profits or established royalties are aimed at compensating mature innovators. Damages compensating patentees like *Suffolk* are aimed at those that are trying to become mature innovators. In contrast, ex post licensing, though a mechanism for generating revenue via patent exclusion, does nothing for innovation. Ex post licensing imposes a tax without any technology transfer. And accordingly, the Court rejected ex post licensing as a use of a patent that patent damages would protect.

In 1895 the Supreme decided, in addition to *Rude*, the case of *Coupe v. Royer*. It also illuminated limited nature of the emerging reasonable royalty caselaw. The patentee Royer held a patent for the "an improved machine for treating hides."⁸⁴ The patentee produced limited evidence on damages. They showed that the defendant had treated 66,000 hides using the machine. And one of the plaintiffs had personally testified that, "in his opinion," use of the machine

⁸³ Id.

⁸⁴ Coupe v. Royer, 155 US 565, 565 (1895)

countered that "there was no advantage in the use of the plaintiffs' mechanism, and that he would not take such a machine as a gift."86

The lower court instructed the jury, that if they found for the patentee on validity and infringement, that the evidence offered by the patentee did suffice to establish damages. But the Supreme Court disagreed stating that "we cannot approve of this instruction which we think overlooked the established law on the subject."⁸⁷ The Court went on to emphasize the difference between suits at law and equity and that at law damages aim to compensate the patentee for "the pecuniary loss he has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts; the measure of recovery in such cases being, not what the defendant has gained, but what plaintiff has lost." The Court ultimately held that "the evidence disclos[ed] the existence of no license fee, no impairment of the plaintiffs' market - in short, no damages of any kind -we think the court should have instructed the jury that, if they found for the plaintiffs at all, to find nominal damages only."88

Infringement was proven, yet the Court held that there was "no damages of any kind." Certainly there was not the kind of mature commercialization needed to prove actual damages via an established royalty or lost profits. Furthermore, there was no licensing at all nor was there any evidence that the "plaintiffs' market" had been harmed. In short, though infringed there was "no damages of any kind" and lower court should have directed the jury to award at most "nominal damages." 89

⁸⁹ Id. at 584. It does appear the Coupe was using the patented machine himself: "This view [about the marking statute?] however, is based on the assumption that the provisions of section 4900, Revised Statutes, are applicable to a case where the patentee has not sold any machine, nor licensed others to use his invention, but has chosen to enjoy his monopoly by a personal and sole use of the patented machine." Coupe v. Royer, 155 U.S. 565, 585, 15 S. Ct. 199, 207, 39 L. Ed. 263, 270, 1895 U.S. LEXIS 2106, 37 (U.S. 1895) -- it appears that 4900 is the marking statute and the question is whether there needs to be any marking in a case where not sale nor any licensing took place.

⁸⁵ *Id.* at 585.

⁸⁶ Id.

⁸⁷ Id.

⁸⁸ Id. at 584.

In 1895 Prof. Robinson of Yale published his famous patent law treatise that captured these developments in patent damages. In beginning his synthesis of damages at law, Robinson emphasized the two separate issues highlighted by the courts. As to the rule of damages he notes the "two species of damages, - nominal and actual."90 And actual damages are "indemnity for injury inflicted, a compensation for a loss sustained." To receive beyond nominal damages, the patentee must provide "clear and definite" proof of both the "existence and extent" of the loss. In other words, "the first point, on which proof should be offered in reference to actual damages is the use made of his patent privilege by the plaintiff; the second is the effect produced by the wrongful acts of the defendant. If the evidence on these two points is so presented as to afford the jury a complete view of the facts which they involve, the amount of actual damages to be awarded can be easily determined."91

As to the first prong, existence of harm, Robinson finds only two scenarios and they are both tied to the way in which the patentee is using his claimed invention. He relates that

> The methods by which the owner of a patent can avail himself of his monopoly may be grouped in two distinct classes. In methods of the first class the practice of the patented invention is thrown open to the public upon condition that the user pay to the owner a definite pecuniary consideration. In methods of the second class the exclusive use of the invention is confined to the owner of the patent or to specific licensees, and the remainder of the public are prohibited from its employment upon any conditions.⁹²

Importantly, "a patentee, who neither derives nor intends to derive benefit from his invention, cannot suffer loss by its infringement."⁹³ For the modern question of patent assertion, the Court in *Rude v. Westcott* made clear that revenue derived from ex post licensing is just not a usage of the patent rights that can lead to compensable patent damages.

⁹⁰ IV Robinson on Patents 319

⁹¹ IV Robinson on Patents 324

⁹² IV Robinson on Patents 324

⁹³ IV Robinson on Patents 364

Importantly, none of these cases support the notion that efforts to commercialize are not an element of actual damages including a reasonable royalty. As will be shown below, the rest of the history of reasonable royalty yields the same conclusion.

C. 1895-1915: Dowagiac & Reasonable Royalty

The above described cases can be described as the critical pre-history of reasonable royalties in part because the courts (and certainly the statute) had yet the use "reasonable" or "reasonable royalties" in their discussion. It is not until 1915 that the Supreme Court first describes this emerging strand of patent damages as focusing on "a reasonable royalty." Nonetheless in that decision the Supreme Court relied heavily upon these earlier cases as well as a number of intervening appellate cases. The case was Dowagiac Manu Co. v. Minnesota Moline.

As explained by the Supreme Court the patent covered a particular improvement in a kind of grain drill and Dowagiac Manufacturing, "[t]he plaintiff, besides owning the patent, was manufacturing and selling drills embodying the patented improvements."⁹⁴ The lower courts approved and affirmed a reward of nominal damages for the plaintiff.⁹⁵

The Court noted that the defendant's infringement in this case was not "not wanton or wilful" and in particular the Court distinguished the facts of the case from another where the defendants had purposefully copied from the patentee.⁹⁶

As to evidence of damages the lower courts "although the number of sales made by the defendants was disclosed, the evidence did not present other data essential to an assessment of the damage sustained by the plaintiff by reason of the defendants' infringement."⁹⁷ The Supreme Court agreed with the masters and lower courts that the patentee had not proven his lost profits. Though "the number of drills sold by the defendants was shown, there was no proof that the plaintiff thereby lost the sale of a like number of drills or of any definite or even approximate number."⁹⁸ That was not the only failing. As described by the Court "[b]esides, it did not

⁹⁴ Dowagiac, 235 US 640, 643 (1915)

⁹⁵ Id.

⁹⁶ Id.

⁹⁷ Id.

⁹⁸ *Id.* at 648.

satisfactorily appear that the plaintiff possessed the means and facilities requisite for supplying the demands of its own customers and of those who purchased the infringing drills."⁹⁹ As is still the case today, to prove lost profits a patentee has to prove a number of difficult issues and the patentee in Dowagiac failed on a number of grounds.¹⁰⁰ In short, there was "no adequate basis for an assessment of damages upon the ground of lost sales."

But as described above, the caselaw had developed with an eye toward those patentees who, though practicing the invention in some way, had nonetheless fallen short of proving lost profits or an established royalty. That was the case here and accordingly that Supreme Court did not allow the nominal damage award to stand. In such cases the Court stated that it was permissible to show the amount of damages by "proving what would have been a reasonable royalty."¹⁰¹

In proceeding to describe this "reasonable royalty" that Court immediately cited to Suffolk v. Hayden as a case where "a like situation was presented."¹⁰² Following the lead of that case, the Court reversed the grant of nominal damages and remanded the case to consider the issue of a reasonable royalty.

The fact of actual damage was, as put by the Court "evident[]" but it was the question of the amount of damages that needed to be addressed. And as to the amount of damage the Court again put emphasis on "the nature of the invention, its utility and advantages, and the extent of the use involved." ¹⁰³

Beyond *Suffolk v. Hayden* the Supreme Court also noted that the lower court had also been contributing to the development of this reasonable royalty case law and the Supreme Court cited approvingly to a number of those appellate decisions. Those cases are explored below. Importantly, all of the cases relied upon by the Supreme Court are of two varieties: either the patentee is engaged in some commercialization efforts (as was the case in Dowagiac itself) or the defendants have explicitly copied from the patentee. Notably absent, is any case where the new liberal vision of patent damages is applied to a case where an

⁹⁹ Id.

¹⁰⁰ See Panduit

¹⁰¹ Dowagiac at 648.

 $^{^{102}}$ *Id*.

¹⁰³ Dowagiac at 648

independent inventor infringes a patent held by a patentee that has undertaken no efforts to commercialize the protected invention. The appellate cases cited by the Supreme Court are McCune v. Baltimore, Hunt Bros. v. Cassiday, Bemis Car Box v. J.G. Brill, and United States Frumentum v. Lauhoff. Those cases are explored in turn below yet they also yield that same conclusion. Reasonable royalties developed to provide an avenue to compute actual damages where some efforts to commercialize had been undertaken *or* the invention had been copied by the defendant. These appellate cases do not support the notion that efforts to commercialize are no longer a necessary element of actual damages

1. McCune v. Baltimore, 3rd Circuit, 1907

including reasonable royalties.

In 1907 the Court of Appeals for the Third Circuit heard the case of McCune v. Baltimore.¹⁰⁴ McCune was the inventor of United States patent 341,930 issued on May 18, 1886. The invention was an improved ash-pan for locomotives. The patent expired on May 19, 1903. The trial was held on November 19, 1906. McCune testified about his "effort[s] to make sale of right to that patent." He testified that in 1887 "I went to the Baltimore and Ohio Railroad Company and I offered it to them for sale and they said they could not use it, that it was no use to them."¹⁰⁵ During that negotiation, McCune admitted that no price was ever fixed for the use of the invention and as B&O refused to license it, he largely gave up further efforts. Even though it appears he became aware that B&O began using an ash pan similar to his in invention as early as 1889 or 1890, it was not until 1902 that he seriously began to enforce his patent when "a friend ... told me [B&O] was using my invention."¹⁰⁶ He testified that from there on "I made it my business for to stop my work and go up and see what they were doing, and I discovered that they were using it on pretty near every engine in the vard."¹⁰⁷

In the subsequent testimony the trial court sustained a

¹⁰⁴ 154 F. 63 (3rd Cir. 1907)

¹⁰⁵ McCune v. Baltimore & Ohio RR Co, Record at 17 (testimony of James B. McCune).

¹⁰⁶ ("because I thought when they had turned it down there was no use in following it up any more and I did not pay much attention to it....")

¹⁰⁷ McCune Record 20 (testimony of McCune).

number of B&O's objections. McCune was asked to describe "[i]n the operation of a locomotive, what if any utility or advantage has this device of yours."¹⁰⁸ The defense counsel for B&O objected to this question and the court sustained the objection citing Coupe v. Royer.¹⁰⁹ McCune was then asked whether he had found his invention in use in any other railroad other than B&O. McCune answered that he had, but before he could further describe those other infringements, the defense counsel objected again. McCune's lawyer explained that

We expect to prove by this witness and possibly by one or two other witnesses that this patent had been in use not only on the Baltimore & Ohio, but has been in use on the Pennsylvania Lines, has been in use on the New York Central, has been in use on other roads and has been in use on roads on the Pacific slope, -- that the purpose of showing that this general piracy of this device has been to destroy the market value and thus renew our offer to show what the utility and the advantage of this is.¹¹⁰

Again the district court sustained the objection to the testimony. Later in its opinion, the district court held that the patent plaintiff McCune "had never granted a license, established a royalty, or manufactured and sold the patent device"¹¹¹ and directed a verdict for the plaintiff for nominal damages only.

On appeal, McCune argued that it was error to deny the testimony and the appellate court agreed. In reviewing that denial, the appellate court addressed the tension between Suffolk v. Hayden and Coupe v. Royer. In reviewing the cases the court made clear that the objective of such evidence was to establish "actual damages" and that existing "licensing fees and royalties are generally, 'though not always, taken as the measure of damages."¹¹² But the court noted that, similar to Suffolk v. Hayden, there may be

¹⁰⁸ *Id.* at 31.

¹⁰⁹ *Id.* at 32.

 $^{^{110}}$ Id. at 33.

¹¹¹ Id.

¹¹² *Id*.

occasions where "generalized evidence must necessarily be resorted to."¹¹³

The court did not feel there was a conflict between Suffolk and Coupe. Instead the court in McCune saw Coupe v. Royer as recognizing the rule from Suffolk that "other evidence may be resorted to in the absence of established royalty and license fees." In supporting that the Court in McCune quoted Coupe v. Royer in its ordering of nominal damages where there was no evidence of license fees or impairment of a market, and "no damages of any kind." The court in McCune regarded that series as implying that evidence of damages of any kind as extending beyond established royalties and lost profits. And therefore the lower court erred in refusing to hear evidence that might show that the patentee's plans to innovate and create a market had been harmed by the appropriation and use of the invention by others. The court remanded the case with instructions to grant a new trial to hear that excluded evidence.¹¹⁴

In short even though McCune "had never granted a license, established a royalty, or manufactured and sold the patent device"¹¹⁵ there were grounds on which to build a If the widespread infringement theory of damages. "prevented the establishment of a market value",¹¹⁶ the appellate court held that it was improper to exclude that testimony. Earlier cases classic cases of established royalty or lost profits made clear that infringement in those cases causes actual damage that should be compensated. McCune does extend patent law's theory of harm beyond established royalty. I hold that those that are establishing a royalty (though they have yet to establish one) could be actually harmed by infringement. Again actual damage, including the case law that developed into reasonable royalties, was premised on harm to the efforts to commercialize.¹¹⁷

- ¹¹³ Id.
- ¹¹⁴ *Id*.
- 115 *Id*.
- 116 *Id*.

¹¹⁷ Furthermore, if McCune's testimony is given credit, the early access to the patent and the technology does support the idea that B&O copied the technology from McCune. This was particularly galling to McCune as his contact at B&O who was the master mechanic for the railroad, was also a close friend. *Id.* at 19 (Mr. Weisgobber, the master mechanic at B&O, and McCune "went to school together and ... were as good friends as mu own brother and myself, but he done me dirt all right.").

2. Hunt Bros. v. Cassiday, 9th Circuit (1894)

In Dowagiac the Court also approvingly cites to Cassidy v. Hunt. In that case the 9th circuit related that

On referring to the bill of exceptions, it will be seen that the patentee testified that he had endeavored to fix the royalty at \$100; that he had in some instances collected that amount as royalty; that he had sold his driers at \$250, and that they had cost him \$92; that his profits were \$158, of which he estimated \$58 to be the profits of the unpatented portions, leaving \$100 as profit on the invention which was said to be infringed. He further testified that, in his judgment, that sum was a fair and reasonable royalty. There was evidence that the established royalty on the prior machine of Alden, a much more expensive drier, made under a patent containing claims similar to those of the plaintiff's patent, was \$1,000, while its cost was but \$250; and that the lifting device in the Alden patent was made at an expense of \$75, which that of the patent in controversy cost but \$17. It is difficult to conceive how there could have been more direct proof concerning the amount of a reasonable royalty in a case such as this. The estimate of the patentee placing it at \$100 is, it is true, an expression of his opinion; but it is an opinion based to some extent upon figures and estimates. He evidently disclosed all the information he possessed upon the subject, - the cost of manufacture, the selling price, so far as he had sold, the profit, and his estimate of the proportion of the profit that should be attributable to the infringed invention. In this class of patents there are necessarily no data from which the value of the royalty can be calculated with mathematical certainty. The damages here, like damages in many other classes of cases, are calculable upon such evidence as it is in the nature of the case possible to produce. The plaintiff was clearly entitled to damages for the infringement.¹¹⁸

¹¹⁸ Hunt Bros. Fruit-Packing Co. v. Cassiday, 64 F. 585, 587 (9th Cir. 1894)

In that case the patentee had "endeavored to fix the royalty at \$100" for use of the invention and had in fact "in some instances collected that amount as royalty."¹¹⁹ The court noted that "[t]he plaintiff was clearly entitled to damages for infringement" and in the absence of an established royalty or lost sale "the only measure of damages was such sum as, under all the circumstances, would have been a reasonable royalty."¹²⁰

Again this appellate case involved a patentee who was starting the process of innovation.

3. Bemis Car Box v. J.G. Brill, 3rd Circuit (1912)

In Bemis Car Box Co. v. J.G. Brill Co., the Plaintiff

"was engaged in the business of manufacturing and selling [railroad] car axle boxes, pedestals, springs, and other parts, not including wheels, which together comprised the running gear for cars drawn by horses upon street railroads, from a period beginning in 1881, or earlier."¹²¹ "Plaintiff was able to establish a broad market for its box, by reason of its dust proof quality, and the market continued to expand until after 1893, when defendant had become an active competitor in the business with the aid of its infringing device. From that time on, defendant's business gradually increased, and the plaintiff's decreased, until, in 1898, plaintiff's sales were only a few hundred boxes.^{"122} "The important facts are that the defendant after becoming familiar as a customer with the qualities of the plaintiff's invention, imitated it by adopting and, so far as the evidence shows, using as a general practice in its truck and car business a box embodying the novelty of plaintiff's invention, which differed from it only in trifling details of mechanical form, and which the defendant, when now called upon to defend its conduct, does not seriously attempt to distinguish

¹¹⁹ Cassidy v. Hunt, 64 F. 585 (1894).

¹²⁰ *Id*.

¹²¹ Bemis Car Box Co v. J G Brill Co, 200 F. 749, 754 (3d Cir. 1912)

¹²² <u>Bemis Car Box Co v. J G Brill Co</u>, 200 F. 749, 754 (3d Cir. 1912)

from the plaintiff's device."¹²³

As the Plaintiff was actively practicing the invention through sales, the referee in the case calculated actual damages using lost profits. In the alternative, in part owing to some questions regarding the fraction of the defendant's sales that would have been made by the plaintiff, the referee also addressed the emerging reasonable royalty cases and reach a similar conclusion as the amount of actual damage caused by the defendant's "reckless" if not "wanton" infringement.¹²⁴ The Third Circuit found no error with the work of the referee:

"We think there was evidence tending to support these several findings by the referee. Had this case been tried by a jury, the evidence was such that a trial judge would not have been justified in giving a jury binding instructions that it could only find nominal damages for the plaintiff."125

The Court concluded that "after careful consideration of them all, we find no substantial ground for reversing the [referee's] report."¹²⁶ Again the case involved a patentee that was trying to sell their invention. In addition the case involved a defendant that had copied from the patentee.

4. United States Frumentum v. Lauhoff, 6th Circuit (1916)

Though all of these reviewed cases were cited approvingly by the Supreme Court in Dowagiac, the case of United States Frumentum Co. v. Lauhoff is regarded as a "seminal" case for developing the reasonable royalty case law.¹²⁷ The patented invention involved a process for making films from corn. The district court held for the plaintiff yet granted only nominal damages.¹²⁸ On appeal the Court of Appeals for the Sixth Circuit reversed on the subject

¹²³ Bemis Car Box Co v. J G Brill Co, 200 F. 749, 757 (3d Cir. 1912)

¹²⁴ Bemis Car Box Co v. J G Brill Co, 200 F. 749, 758 (3d Cir. 1912)

 ¹²⁵ Bemis Car Box Co v. J G Brill Co, 200 F. 749, 764 (3d Cir. 1912)
¹²⁶ Bemis Car Box Co v. J G Brill Co, 200 F. 749, 765 (3d Cir. 1912)

¹²⁷ Chisum on Patents 20.02 ("Judge Denison's seminal opinion in United States Frumentum Co. v. Lauhoff (1914) gave the reasonable royalty concept a new life, a life which was subsequently christened by the Supreme Court in 191510 and by Congress in 1922.")

¹²⁸ Frumentum v. Lauhoff, 216 F. 610, 612 (6th 1914)

of damages.

The Court held that, though a patentee does not have an established royalty nor has any provable lost profits, that alone does not automatically limit the patentee to nominal damages. The court cited back to the language of Suffolk v. Hayden:

> "Where there is no established patent or license fee in the case, or even an approximation to it, general evidence must necessarily be resorted to. ... And what evidence ... could be more appropriate and pertinent than that of the utility and advantages of the invention?"¹²⁹

And the court also considered the supposed tension between Suffolk v. Hayden and Coupe v. Royer. And the Frumentum court found no real conflict. Along the lines supported by the Third Circuit in McCune v. B&O, the Seventh Circuit in Frumentum also found no real conflict between the two Supreme Court cases. In considering the award of nominal damages in Coupe and the language used to support that award, the Frumentum court stated

"the language of this sentence [in Coupe] seems to have been carefully chosen so that it should not go beyond the instant case. Its conclusion is predicated not only upon the lack of evidence of an existing license fee or of an impairment of plaintiff's market, but also upon the lack of evidence of "damages of any kind." If the only possible recoverable damages depended on the existence of one or the other of the two specified criteria, there was no object in referring to other evidence of other damages of some other kind."¹³⁰

Suffolk should be seen not as a case that enlarges the theories of harm beyond harm to efforts to commercialize. Instead where efforts to commercialize are evident but the strictures of lost profits nor established royalty cannot be satisfied,

¹²⁹ *Id.* at 619

¹³⁰ *Id.* at 623.

Suffolk should be seen as liberalizing the type and amount of evidence needed to adequately account for that evident harm. While in a case like Coupe where no evidence of harm is presented, the award of nominal damages is not only reasonable but it is required.

Yet despite supporting the generalized evidence of a reasonable royalty, Frumentum cannot support substantial damages for patentees who have undertaken no steps toward commercialization. Two facts are critical for so limiting Frumentum. First, the patent holder was itself practicing the process and had the manufacturing capacity to meet the demand that instead went to the defendant.¹³¹ Yet Frumentum fell short of proving the other essential elements of lost profits. Frumentum failed to show that but for the infringement, the customers of the defendant would have instead bought from Frumentum.¹³² Frumentum was practicing the patented invention but could not fulfill the demanding standard of lost profits. The Frumentum court noted that based on those facts "[i]t follows that, upon the basis of the master's findings, the District Court was right in directing nominal damages only; and it would ordinarily follow in this condition of the case that the judgment below would be affirmed."¹³³ Yet the court was unwilling to award nominal damages based largely on the second fact: the infringer was the original inventor who had sold the patent to Frumentum. The infringer cannot have been an innocent The court held that "we are not independent inventor. satisfied to have this case [award only nominal damages]. There is a finding that the patent was valid; that the defendant Lauhoff, who had sold. the patent, infringed it extensively and so endeavored to keep what he had sold; and that defendants' sales were so large that no one can doubt the actual existence of substantial damages. Under such circumstances, to have plaintiff recover nothing, because the

¹³¹ Frumentum v. Lauhoff, 216 F. 610, 614 (6th 1914)("It was shown (and we assume sufficiently) that plaintiff had factory facilities for manufacturing the additional amount [of product made by the process] and so could have filled the orders [actually filled by the defendant].")

¹³² Id. at 614. ("There was no testimony that defendants' customers had formerly bought from plaintiff, nor that they were in negotiation with plaintiff or in a territory in which plaintiff was selling, nor of others of those circumstances sometimes held sufficient and sometimes held insufficient to raise the presumption that plaintiff would have made the sales.") 133 Id.

difficulty of absolutely definite proof is insuperable, is a result so unfortunate that, if avoidable, it should not be permitted."¹³⁴

Not only was the plaintiff practicing the patented invention themselves, but the defendant was an independent inventor. Under those facts, infringement by the defendant certainly harms the patentee's efforts to commercialize and it harms the integrity of a system of patent transfer. As put by the court "no one can doubt the actual existence of substantial damages" even though lost profits and established royalty could not be proven. Frumentum certainly counts as one the early appellate cases to liberalize the types of evidence that can be used to estimate the amount of actual damages but it cannot be relied upon to argue that a patentee who has undertaken no efforts to commercialize the patented invention will be awarded substantial damages when infringed by an independent inventor.

As explained in greater detail above, all of the cases cited by the Court in *Dowagiac*, as well as *Dowagiac* itself, involve either a practicing patentee or a defendant that has explicitly copied form the patentee, or both. There is no case where a substantial reasonable royalty was awarded though the patentee had undertaken no real efforts to commercialize the technology. As shown below, the introduction of reasonable royalty into the statute nor cases that followed change that understanding of a reasonable royalty.

D. 1922-1946: Codification of a Reasonable Sum as Damages

In 1922, seven years after the Supreme Court heard the Dowagiac case and first used the term reasonable royalty, Congress amended the patent statute and codified the concept into the statute. The statutory provision stated that

> "If on the proofs it shall appear that the complainant has suffered damage from the infringement or that the defendant has realized profits therefrom to which the

complainant is justly entitled, but that such damages or profits are not susceptible of calculation and determination with reasonable certainty, the court may, on evidence tending to establish the same, in its discretion, receive opinion or expert testimony, which is hereby declared to be competent and admissible, subject to the general rules of evidence applicable to this character of testimony; and upon such evidence and all other evidence in the record the court may adjudge and decree the payment by the defendant to the complainant of a reasonable sum as profits or general damages for the infringement..."¹³⁵

Though "reasonable royalty" does not directly appear in the statute, this amendment fits closely with case law that culminated with Dowagiac. First, on its face the statutory provision applies where "it appear[s] that complainant has suffered damage from the infringement ... but that such damages ... are not susceptible of calculation ... with reasonable certainty...." In other words, where the patentee has been commericalizing the patented invention in some way but cannot yet establish a royalty or prove lost profits, then this new statutory provision applies. And where it applies the court "may" turn to general rule of evidence by which the court can adjudge a "reasonable sum [for the] general damages." That language falls nicely in line with the assessment of reasonable royalty caselaw described above.

Consistent with the caselaw, the statutory amendment certainly does not alleviate the need to establish the fact of harm. The statutory provision does not override Coupe v. Royer. In other words, the statute directs a court to consider a reasonable royalty only "if on the proofs it shall appear that the complainant has suffered damage from the infringement." Interestingly some modern commentators have argued that later caselaw disregarded this seemingly clear mandate. In his patent law treatise, Donald Chisum addresses this very same point. He notes that

"the [1922] statute seemed to require the complainant to prove the existence of damage

¹³⁵ Act of Feb. 21, 1922, Ch. 58, 42 Stat. 392.

to the complainant or profits by the defendant (the actual amount being uncertain) before a reasonable royalty could be recovered. The courts refused to read the statute so literally, reasoning that some damage should be presumed if the patented invention is a valuable one and the defendant made substantial use of it."¹³⁶

In support of this assertion Chisum cites three cases: Austral Sales Corp. v. Jamestown Metal Equip. Co., Standard Mailing Mach. Co. v. Postage Meter Co., and American Tel. & Tel. Co. v. Radio Audion Co.¹³⁷

Reading these cases though supports a narrower view of the cases and their treatment of the newly minted reasonable sum. Rather indicating some change, the cases are rather unremarkable when compared with the earlier cases that developed reasonable royalties.

Again the cases relied upon by Chisum feature either a patentee that is practicing the patented invention is some way or they feature a defendant that copied from the patentee. In Austral the court found "ample evidence … that a large number of sales have been made by the plaintiff under the patent in suit."¹³⁸ And in Standard Mailing Machines, "the plaintiff was in the market with two devices."¹³⁹ And as to the last case, American Telephone & Telegraph v. Radio Audion Co., it is very similar to the complicated facts found in Frumentum. In AT&T, the plaintiff as the exclusive licensee is suing the inventor's company for contributory infringement.¹⁴⁰ Here, as with Frumentum, the defendants cannot be said to be independent inventors as the defendant was in fact the original inventor who had then proceeded to sell the patent but who continued to use the patented

¹³⁶ Chisum 20.02 (citing Austral Sales Corp. v. Jamestown Metal Equip. Co., 41 F. Supp. 508, 510, 51 USPQ 178 (W.D. N.Y. 1941); Standard Mailing Mach. Co. v. Postage Meter Co., 31 F.2d 459 (D. Mass. 1929); American Tel. & Tel. Co. v. Radio Audion Co., 5 F.2d 535 (D. Del. 1925).

¹³⁷ Id.

¹³⁸ Austral Sales Corp v. Jamestown Metal Equip. Co, 41 F. Supp.508, 510 (W.D.N.Y. 1941)

¹³⁹ Standard Mailing Machines Co. v. Postage Meter Co., 31 F.2d 459, 461 (D. Mass. 1929)

 $^{^{140}}$ American Tel. & Tel. Co. v. Radio Audion Co., 5 F.2d 535 (D. Del. 1925).

invention.

Thus, though the Chisum is widely (and rightfully regarded as an important source for patent doctrine and history), in this case the critically important supposition by Chisum is just not supported by the cases. The cases still support the notion that (even once introduced into the statute), a reasonable royalty still required some efforts to commercialize. The cases cited by Chisum should be understood more narrowly to support the proposition that where the patentee has undertaken some efforts to commercialize or the defendant has copied then the courts presumed the fact of damage due to infringement. During this period there still is no support for presuming damage in every case where infringement is established.

E. 1946-1952: Codification of Reasonable Royalty as Damages

In 1946 the patent statute was once again amended. The statute now read:

"[U]pon a judgment being rendered in any case for an infringement the complainant shall be entitled to recover general damages which shall be due compensation for making, using, or selling the invention, not less than a reasonable royalty therefor"¹⁴¹

Here for the first time reasonable royalty appears in the statute in a form that resembles the modern usage. A few things are notable about the 1946 amendment. First, the award of 'general damages' is mandatory; it is something that the court "shall" award. Second, the statute also introduced the language "not less than a reasonable royalty therefore." Though that language adds a mandatory floor, it also makes clear that this reasonable royalty award is still a type of damage that compensates for infringement. In other words, if there is no actual harm then there are no damages and even a reasonable royalty cannot be more than nominal damages.

The legislative history for the 1946 amendment supports this understanding. "The object of the bill is to make the basis of recovery in patent-infringement suits

¹⁴¹ Act of August 1, 1946, Ch. 726, § 1, 60 Stat. 778.

general damages, that is, any damages the complainant can prove, not less than a reasonable royalty...."¹⁴² Just as with the 1922 amendment, the 1946 version still required that the fact of damage be proved. In fact, because the statute makes clear that a "reasonable royalty" is used "therefore," reasonable royalties are a type of actual damages. reasonable royalty differs from lost profits or established royalty only in that the former two use specific evidence while the latter relies on general evidence. The patentee must still establish the fact of harm by the infringement. The addition of reasonable royalties did not change that requirement but it did (consistent with the case law from which it developed) liberalize the evidence that could be utilized to establish the amount of those damages.

And then again 1952 Congress, in its overall patent codification effort, slightly adjusted the language again. With that change, the patent statute arrived at the familiar form that still exists today:

> "Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer....¹⁴³

As noted by the Supreme Court in Aro "In the 1952 codification, §§ 67 and 70 of the 1946 Code were consolidated in the present § 284. The stated purpose was merely 'reorganization in language to clarify the statement of the statutes.",144

F. 1952-1964

Though a district court case, Georgia-Pacific Corp. v. United States Plywood Corp., is one of the most cited cases dealing with post-1952 reasonable royalties.¹⁴⁵ It is most well-known for its famous listing of fifteen evidentiary factors "relevant, in general, to the determination of the

¹⁴² H.R. Rep. No. 1587, 79th Cong., 2d Sess. 2 (1946); S. Rep. No. 1503, 79th Cong., 2d Sess. (1946).

¹⁴³ 35 U.S.C. 284.

¹⁴⁴ Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476 (1964)(citing H.R. Rep. No. 1923, 82d Cong., 2d Sess. at 10, 29.)

¹⁴⁵ 318 F. Supp. 1116 (S.D.N.Y. 1970).

amount of a reasonable royalty."¹⁴⁶ Though efforts to commercialize through "royalties received by the patentee ... [either] proving or tending to prove an established royalty" are the very first listed evidentiary factor, the list as a whole does not appear to demand any efforts to commercialize by the patentee. Indeed absent such actual licensing agreements or any other efforts to commercialize, the underpinning of the so-called Georgia Pacific factors is nonetheless the determination of "the amount a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time infringement began)."¹⁴⁷ In other words, absent any efforts to commercialize the patentee is still entitled "in no event less than" the amount of that hypothetical negotiation. And that hypothetical negotiation can return a nominal value where the invention has little utility or there exist low cost non-infringing alternatives, but in general the patentee gets the amount of that negotiation whether or not the patentee was commercializing or not.

The trouble is that Georgia-Pacific cannot support that broad understanding of reasonable royalty. In particular, as with the earlier cases that awarded substantial damages in the form of a reasonable royalty, the patentee in the case, the United States Plywood Corp., was in fact commercializing the patented invention though its manufacture and sale of its Weldtex striated plywood.¹⁴⁸ And as a manufacturer, U.S. Plywood certainly tried to show that Georgia Pacific's infringement caused damages by way of lost profits but ultimately U.S. Plywood's case failed in this regard as to the amount of damage because its "contentions, in light of the record herein, fall outside the considerable latitude in speculation sometimes necessary in this type of case."¹⁴⁹ The damages issue in the case was referred to a special master and much of the district court opinion deals with that special master's report.

In reviewing the report, the court considered "specific findings and conclusions ... of controlling importance."¹⁵⁰ The first, "[t]he Report found, and that finding is sustained by the court, that USP proved "the fact of harm" or "the fact

31-Jul-14]

¹⁴⁶ *Id.* at 1120.

¹⁴⁷ Id.

¹⁴⁸ Georgia-Pacific Corp. v. United States Plywood Corp., 243 F. Supp. 500, 502 (S.D.N.Y. 1965).

 $^{^{149}}_{150}$ Id. at 511.

of harm of injury," i.e. "that loss of sales of Weldtex occurred by reason of GPs infringement."¹⁵¹ The court in Georgia Pacific explicitly saw the need to establish the fact of harm and it did so based on the commercialization efforts by United States Plywood via their sales of Weldtex plywood.

CONCLUSION

A review of the history of patent damages at law leads to a First, they were granted as number of observations. compensation for actual harm incurred by the patentee. The patentee had the burden of establishing the fact and amount Second, during 19th century the courts of the harm. developed two related ways in which a patentee could show harm. One was a program for granting licenses for the use of the invention and the other was actual manufacture and sale of the invention. Both of these were programs of innovation. They were programs of technology transfer that brought the invention from the patentee to users that can utilize it. Third, during the 19th century, the courts became concerned that patent damages law had become too strict. Some patentees though they clearly had been harmed in fact, were unable to establish the amount of damages via lost profits or an established royalty and were instead awarded nominal damages. Based on that concern, the courts began allowing generalized evidence to prove their harm. This was known as a reasonable royalty. It is that case law that Congress codified in 1922 and subsequent amendments in 1946 and To understand the modern contours of reasonable 1952. royalty requires an understanding of the cases that first developed that concept some one hundred fifty years ago. Properly understood reasonable royalties still hinge on efforts (early as they may be) by the patentee to commercialize. And for a patentee that has engaged in no efforts to commercialize, infringement alone causes no actual harm and a nominal award is a reasonable royalty in those cases. Modern patent law has incorrectly interpreted the damages statute to presume compensable harm (and thus a substantial reasonable royalty) just from the fact of infringement. That presumption is not only unsupported by patent history but it is also in tension with it.