

The Case For Admitting Settlement License Agreements In A Reasonable Royalty Analysis

By Stephen J. Conroy, Robert Knudsen and Russell Mangum

*It is clear that a payment of any sum in settlement of a claim for an alleged infringement cannot be taken as a standard to measure the value of the improvements patented, in determining the damages sustained by the owners of the patent in other cases of infringement. Rude v. Westcott, 130 U.S. 152 Supreme Court 1889.*¹

I. Introduction

Estimating damages in a patent-infringement case almost always involves estimating a reasonable royalty for the patent in suit. The language of the relevant U.S. Code includes a provision for damages to be “no less than a reasonable royalty.”² Of the 15 factors that are more pertinent for experts to consider according to *Georgia Pacific v. U.S. Plywood*,³ the first two have to do with identifying an existing royalty rate—either for the patent in suit (factor 1) or other comparable patents (factor 2).

Given the emphasis on existing licenses either for the patent in question or comparable ones, we find the practice prevalent in many courts of removing from consideration any licenses originating from court settlements to be artificially limiting and possibly even harmful to the damages estimation process.⁴ Since arguments in favor of using settlement license agreements (SLAs) have been articulated elsewhere⁵ we wish to emphasize here a few key issues and con-

cepts related to SLAs while incorporating a more detailed analysis of the settlement process—framed as a Licensing Negotiation Continuum—to provide insights into the considerations that should be made by experts when using SLAs. We also provide a model that provides a framework for analysis of the various factors—such as probability of winning the law suit and litigation costs—to consider when using SLAs in damages estimation analyses. Further, a recent ruling by the U.S. Court of Appeals, and interpretation of this ruling by District Courts, provide evidence that the courts may be becoming more accepting of the use of SLAs.⁶ We argue that, from an economic viewpoint, that trend should continue.

II. The Uncertainties of License Agreements

Due to the importance of terms in historical licensing agreements in establishing a reasonable royalty, courts will almost always admit into evidence non-settlement license agreements (NSLAs) for consideration by experts and the trier of fact in reaching conclusions about a

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1. *Rude v. Westcott* is often referenced as precedent for the proposition that settlement license agreements are categorically inadmissible and/or irrelevant. This view is not universal, and one recent opinion clarifies the context of *Rude v. Westcott*, and concludes it does not support the view that settlement license agreements are categorically inadmissible and/or irrelevant to the determination of a reasonable royalty [Memorandum Opinion and Order, *Volumetrics Medical Imaging LLC v. Toshiba America Medical Systems, Inc. and Seimens Medical Solutions USA, Inc.*, pp. 11-34, June 20, 2011].

2. 35 U.S.C. § 284.

3. *Georgia Pacific v. U.S. Plywood* (U.S. District Court, SD NY, 1970; aff'd Second Circuit, 1971).

4. See, for example, *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078-79 (Fed. Cir. 1983).

5. For a thorough discussion of this issue, see Chapman, Michael, 2009. “Using Settlement Licenses in Reasonable Royalty Determinations,” *IDEA: The Intellectual Property Law Review*, 49(3), 313-357.

6. See, for example, *Resqnet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860 (2010) in which the majority decision rejected part of the damages calculations (“bundling” part) but accepted the other (settlement licenses). For an earlier Federal Circuit ruling favorable toward the use of an SLA, see *Studiengesellschaft Kohle m.b.H. v. Dart Industries, Inc.*, 666 F. Supp. 674, 682 (D. Del. 1987).

7. This does not mean the trier of fact will find the license(s) comparable, but unlike what has often happened with SLAs, NSLAs are typically admitted and related information can be weighed for relevance.

reasonable royalty.⁷ In doing so courts are also at least implicitly acknowledging that a number of inherent uncertainties connected with NSLAs do not tarnish their potential value beyond usefulness.

NSLAs are normally obtained through publically available sources (such as licensing databases) or through the discovery process (in response to discovery requests regarding license agreements entered into by defendant or plaintiff). Agreements thus obtained often contain important information about the terms of the license, but seldom provide any information about the context under which a license agreement was reached. Thus experts normally have a basic description of the technology being licensed and the terms of the license (in particular the scope of the license and its financial terms) but little else. Specifically, potentially relevant considerations of which experts may be unaware include licensor and licensee assessments of: (a) patent validity, (b) past or expected future revenue subject to the license/patent, (c) patent design-around alternatives, (d) actual or anticipated litigation considerations, and (e) the relative value of other intellectual property, cross licenses, product support, *etc.*, that may be part of the agreement. In the context of the present discussion it is interesting to note that while litigation-related

considerations may be an unknown for NSLAs, the presence of litigation-related considerations in the settlement is frequently a principle reason given for not admitting SLAs into evidence.

III. NSLAs Compared to SLAs

Due to the fact that actual market data can be an important element of a reasonable royalty analysis and that NSLAs are accepted as evidence despite the presence of a number of uncertainties, we now wish to contrast NSLAs with SLAs. Do SLAs have more uncertainties than NSLAs that would justify the exclusion of SLAs based on a greater level of uncertainty? Table 1 below lists a number of factors that could be relevant to an assessment of reasonable royalty and summarizes the general level of knowledge (low, medium or high) an expert would typically have regarding that factor, for both NSLAs and SLAs.

There are two factors (“scope of license” and “financial terms of license”) where information availability is expected to be “high,” three where information would be “medium” and five that would be “low.” Focusing on a few of the assessments: “scope of license” is rated “high” because an expert would usually have a copy of the license that would describe its scope (e.g. exclusive vs. non-exclusive, field of use, geography covered, *etc.*). The “relative bargaining positions of the parties” is rated “medium,” because some of this may be ascertained from research of publically available information (e.g. who are the parties, and are they competitors or inventor vs. manufacturer), whereas other aspects of this dynamic would be private. The “relative value of other IP” is rated “low,” because information about the value of other IP referenced in a license agreement is usually difficult to obtain. The “anticipated litigation costs” is rated “medium,” because information about the range of costs for patent litigation is publicly available information. Two litigation related factors are included for NSLAs (as well as SLAs), because almost all licenses are taken under some level of threat of litigation arising from steps taken to enforce potential rights conveyed by a patent.⁸

Comparing all of the factors in Table 1, what this analysis demonstrates is that the level of knowledge one has about an SLA is often at

Table 1. Potentially Relevant Factors For A Reasonable Royalty Determination And Level Of Information Generally Available To Expert		
Factor	Information Availability	
	NSLA	SLA
Understanding of licensed technology	Medium	Medium
Scope of license	High	High
Financial terms of license	High	High
Assessment of patent validity	Low	Low (or higher)
Revenue subject to license	Low	Low (or higher)
Design-around alternatives	Low	Low (or higher)
Relative value of other IP and support contained in the license	Low	Low
Relative bargaining positions of the parties	Medium	Medium (or higher)
Assessment of litigation risks and liability outcomes	Low	Low (or higher)
Anticipated litigation costs	Medium	Medium (or higher)

least as good as an NSLA, and may in fact be better. Generally, the level of information known about an SLA relative to an NSLA will be greater the further along the litigation progressed prior to the settlement due to the information learned about the patent and its related products during the litigation discovery process. This is particularly true if the SLA in question relates to the patent(s)-in-suit. For example, “revenue subject to license” is rated “low” for NSLAs because knowing sales by product (or even products subject to the patent) is generally not publically available information, whereas this non-public information may be available for SLAs as a result of the litigation discovery process.⁹

If the amount of information or level of information certainty connected with the NSLA vs. SLA is not the distinguishing factor for acceptance vs. exclusion, then perhaps there is some other reason, *e.g.*, the litigation process itself? To address this question it is important to remember that a patent relies on the law for its value. The grand bargain of the patent system is: make your investment, develop your invention and disclose your results in exchange for a temporary, legally enforceable right conveyed by the patent that is the initial source of the invention’s value. Without this legal right, the copier, or the creator of a product that happens to use the patent, has little if any incentive to pay the patent holder. Here again, SLAs do not appear to be markedly different than NSLAs, in that in both cases the license is taken due to the

legally enforceable right (or potentially enforceable right) and the related financial terms reflect the underlying economics of the invention and the cost of litigation. The difference between NSLAs and SLAs is that the SLA occurred after it had passed beyond the threat of litigation to actual litigation, and was agreed upon before a final verdict was delivered in the case. It is important to understand here that all licensing agreements—SLAs and NSLAs—exist because of the credible threat of patent enforcement, *i.e.*, litigation.¹⁰ While there are many reasons parties litigate, the litigation process can be viewed as an economically rational way to gather the information necessary to reach a reasoned outcome. As such, we argue that SLAs may actually confer some advantages over licenses agreed to before a law suit has been filed.

IV. Licensing Negotiation Continuum

As the previous section suggests, the process of negotiating a license can be thought of as a continuum with many different stages at which a license can be entered into, starting with pre-litigation negotiations and going all the way to an adjudicated outcome. The existence of this continuum further supports the idea that SLAs should be allowed to be considered in a reasonable royalty analysis. A representation of the licensing negotiation continuum is shown in Figure 1.

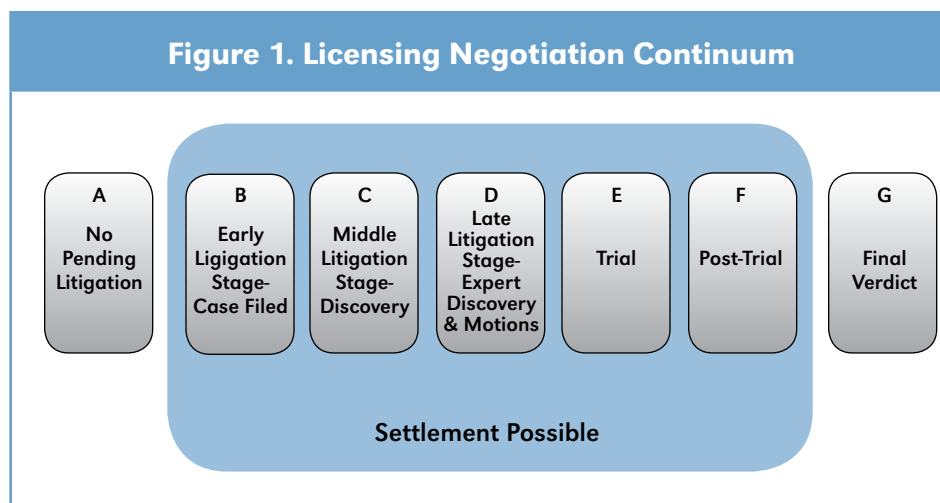
As shown in Figure 1 the negotiation could occur before a law suit has been brought to the courts (“A”). It could occur any time during the litigation process in the form of a settlement (“B”—“E”). The license could also be the result of a trial verdict (“F”), either a verdict on liability or a verdict on liability and damages.¹¹ Finally, the license could be the result of a full-adjudicated outcome after all appeals have been exhausted (“G”). What seems incongruous is licenses

8. If no threat of litigation existed, there would be little motivation to incur the costs of obtaining a license, and little value in the license once obtained. Neuenschwander (2002, p. 100), provides an example in which negotiation for a patent license was actually suspended by the prospective licensee until a law suit was filed by the patent-holder in order to demonstrate a credible threat of litigation. [Neuenschwander, Charles R. 2002. “Is That Your Final Offer? Valuing Patent Licenses in Infringement Negotiations,” *les Nouvelles*, September, 100-103.]

9. See Footnote 5, *supra*.

10. See Neuenschwander, Charles R. 2002, *supra*.

11. Legal proceedings are sometimes bifurcated, such that a finding of liability may be reached and damages are then the subject of a second trial (repeating to some degree steps “C”—“E”). Post-trial, step “F,” refers to a settlement outcome after a verdict on liability or liability and damages has been given.



that occur in stages “B”—“E” are viewed differently by the courts from those in “A,” “F” and “G” from an admissibility standpoint. There are two facts about the licensing continuum that highlight this incongruity. First, generally speaking, the further along the continuum one moves the more the economic facts underlying the license become known. Thus at stage “C” accused revenue and product profitability would normally become known, whereas at Stage “A” these facts are likely not known or much more uncertain. Second, the further along the continuum one is, the more litigation related events have occurred. Thus at the conclusion of stage “E” all the evidence will have been submitted to the court, and a verdict (at least on liability) will have been rendered.

Even if one were to argue that settlements occurring at stages “B”—“E” are somehow less-valuable or perhaps of a lower quality than those at “A” or “F,” we would argue that information from these SLAs would be better than no information at all—especially in cases where there is no other actual market-based license to which experts could refer. Expert witnesses can use the information and weight it accordingly, and opposing experts can identify flawed interpretation or application. Failure to consider this important information may ultimately lead to inferior damage estimations. Chapman (2009) articulates this point well in his discussion of why even an “established royalty” may not necessarily be a “reasonable royalty.”¹²

A final concern here is that the proportion of IP cases resolved by trial has apparently declined dramatically. Galanter (2004) found that the proportion of trials as a percent of dispositions fell from 10.6 percent in 1962 to only 2.4 percent in 2002 while the number of dispositions increased from 1,595 to 7,872.¹³ Thus, to the extent that the courts rely on information from only “A,” “F” and “G” in our Figure 1 and exclude information from “B”—“E” the potential impact on available evidence is substantial and increasing.

12. Chapman, 2009, p. 325, including footnote 49. Note that Chapman is arguing for a proper weighting of all of the relevant factors in using existing royalties as a basis for determination of the reasonable royalty. He notes on p. 338 regarding the Comparables Method: “The (Comparables) method simply requires comparable licenses and relies upon the expert and fact-finder to adjust the terms of the comparable licenses to account for the differences between the observed license and the hypothetical license.”

13. Galanter, Marc., 2004. “The Vanishing Trial: An Examination of Trials and Related Matters in Federal and State Courts,” *Journal of Empirical Legal Studies*, 1(3), 459-570.

VI. Discussion of Seven Reasons Courts Have Given for Excluding SLAs

The court in its role as gatekeeper may deem SLAs inadmissible for a variety of reasons. We would argue that in almost all cases those reasons relate to economic factors that can be weighed by experts in assessing the ability of an SLA to inform a reasonable royalty analysis. There is actually little harm in admitting all SLAs since characteristics that would deem them irrelevant or inappropriate for use can be identified, and highlighted by cross examination and/or by testimony by opposing experts. The reasons for exclusion of SLAs from evidence (shown in *italics* below) and our comments regarding their inclusion from a financial experts’ perspective are as follows:

- i. *SLAs are made in the context of litigation and therefore influenced by litigation considerations.* While this is certainly true, this is no different from most other NSLAs which are also taken as a result of threatened litigation. Courts routinely (and rightfully) admit into evidence abstracts from royalty databases, as well as the licensing agreements of plaintiff or defendant, with little or no consideration of whether they may have been influenced by actual or threatened litigation. We see little evidence that license agreements in general are the result of the desire to obtain know-how, but rather much more commonly the result of implicit or explicit enforcement of a patent.
- ii. *The royalty dollar amount of an SLA may be influenced by the cost of litigation.* To the extent this is true, it would also be true of most NSLAs. Moreover, this is an economic fact that can be taken into consideration in assessing the royalty amount indicated by the license. There are a number of sources that provide information on the cost of patent litigation. These amounts can then be used to assess how they may have influenced a licensing negotiation. Often a simplifying assumption about the direction of the influence can be made to establish a floor or ceiling indicated by the license, or it may be the case that since both parties can be expected to incur similar costs that the cost of litigation has no ultimate influence on the royalty rate or amount. These are all factors that can be weighed by the expert in assessing the usefulness of the license in determining a reasonable royalty. It is also important to remember that the farther one moves along the Licensing Negotiation Continuum, the less influence future litigation costs should have. Sunk litigation costs (past costs that are not expected to be recovered) are clearly irrelevant to a decision to settle in order to limit litigation costs.

Thus, an SLA entered into on the eve of trial should be much less influenced by future litigation costs than one entered into shortly after a case is filed. In Section VIII below, we present a model that can be used in considering what influence, if any, the cost of litigation may have on a royalty amount.

iii. *The SLA terms may be influenced by the defendant's ability to pay the settlement amount.* The same may be true of an NSLA (*i.e.*, the financial terms can be influenced by a licensee's ability to pay). Thus, this is not a condition that differs between SLAs and NSLAs. Again this is an economic fact that can be taken into consideration in assessing the royalty amount indicated by the license. In particular the financial expert can look at the financial condition of the licensee in determining if this may have been a factor.

iv. *The SLA royalty amount may be influenced by an assessment as to the strength/validity of the patent.* First, this is also true of NSLAs that are nonetheless admitted and considered by the expert.¹⁴ Second, in any estimate of value experts are called upon to make risk assessments and judgments about factors that call for a royalty to be adjusted either up or down. These adjustments may be handled through the application of a discount rate or as one of a series of factors influencing the royalty rate up or down, as is frequently done when performing a Georgia Pacific type analysis. Third, this may not always be the case, depending on when, in the course of litigation, the settlement occurred. For example, in a bifurcated proceeding where liability has been established, or when court rulings have made infringement and/or validity virtually assured.

v. *Facts may not be known about the context of the settlement, such as the units or amount of accused revenue.* Once again, this is not a factor that distinguishes SLAs from NSLAs. There is no reason to believe, as a general matter, that more is known about these facts when evaluating an NSLA compared to an SLA. In both instances, this is an area that can be researched by the financial expert. The outcome of that research would then determine to what degree the license proves useful

14. It may be the case any given NSLAs may reflect a situation where the parties generally agreed on the likely validity and accused infringement of the patent at issue. But, this is also true with respect to SLAs. The fact that parties entering into a license agreement may have anywhere from widely disparate to highly congruous views on liability and damages is not related to whether the agreement is a SLA or NSLA, and does not support a position for differential treatment with respect to whether the agreement should be included in the information available to the expert when informing opinions.

to the overall analysis. In fact, there is a legitimate reason to believe that in many SLAs—those where litigation has progressed into discovery—more is known about the extent of accused commerce (*e.g.*, units, revenue, profitability, related goods) than an NSLA. In these instances, SLAs are superior, not inferior, to NSLAs in terms of information known by the parties when entering into the license.

vi. *SLAs may have dates after the date of the hypothetical negotiation.* This issue is not a distinguishing characteristic of SLAs, as the identical issue arises for NSLAs. In either case the use of information after the hypothetical negotiation date is a common and accepted practice (see for example, *Fromson v. Western Litho Plate and Supply Co.*, 1988). Financial experts are commonly called upon to make fact-based adjustments to market data to reflect the passage of time. This is not a logical reason to treat SLAs differently than NSLAs.

vii. *The SLA is for a lump sum rather than in the form of a running royalty rate.* Conversion from lump sum to running royalty (or vice-versa) is a common issue dealt with by experts analyzing a licensing agreement (whether settlement related or not) and should not therefore be the basis for excluding potentially relevant economic information.¹⁵ There are relevant conceptual and quantitative issues to address when utilizing lump sum royalty payments to establish a running royalty rate, but these issues can be addressed by the financial expert and are irrelevant with respect to considering characteristics of SLAs, relative to NSLAs, that would justify excluding the former from the information set available to the financial expert.¹⁶

VII. Three Good Reasons Why SLAs Should Be Used

Our review of SLAs is not limited to the argument that reasons to exclude them are unfounded (at least relative to the apparently accepted position that NSLAs are nearly universally allowed to be considered). We have also identified three affirmative reasons that SLAs should be included in the information a financial expert can and should be allowed to consider when forming an opinion on reasonable royalty damages.

15. See Lu, Jiaqing "Jack." 2010. "Does Upfront Payment Reduce Running Royalty Rate? Theoretical Perspectives and Empirical Analysis," *les Nouvelles*, 45(3) (September), 160-165.

16. A more specific treatment of the methods and issues related to conversion of a lump sum royalty to a running royalty is beyond to scope this paper. Suffice it to say, however, that the information helpful to such an analysis is more likely to be available through discovery in a litigation setting.

First, SLAs confer (potentially valuable) information. Even if that information is influenced by various factors relating to the settlement or the settlement process, or even ultimately given little or no weight by the expert, we believe that having more information is better than less. While it is important to obtain as much information as possible when considering SLAs, there are bound to be unknowns. The job of the expert is to assess the known and unknown facts about the license to determine the degree to which it can inform the ultimate conclusion. Again, as a general matter we believe that financial experts can provide more accurate estimations with more information and approaches, not fewer. Further, if an expert determines that the additional information does or does not have probative value, then the reasons for that conclusion can be fully vetted by both sides and the trier of fact can have the benefit of that process. *A priori* exclusion of all SLAs precludes the opportunity for this to occur.

Second, SLAs can provide a valuable cross check against other approaches, such as the use of “comparable” licenses. As noted in our discussion above regarding the uncertainties of license agreements, even NSLA based royalty rates are not without their flaws. We are not the first to make this observation.¹⁷ Degnan and Horton note, for example (p. 95) that “Royalties are seldom, if ever, ‘pure.’ Rather, they are contextual. They are forged in the crucible of arms-length negotiations where the royalty rate, although a vital component, is frequently not the only important issue.” Notice the parallel criticism here between NSLAs and SLAs, namely that both agreements are potentially “contextual” and part of a complex negotiation. To exclude one (SLAs) and accept the other seems inconsistent with this economic reality.

Third, it is frequently the case that SLAs are the only source of real world royalty transactions for the patents in suit. While one may be able to argue that licenses agreed upon in the absence of a pending lawsuit are preferable to SLAs (though we have provided several reasons why this may not be so), it is very difficult to comprehend why one would prefer to ignore SLA information in cases where there are no other NSLAs to consider.¹⁸ The more unique the technology, the more important it is to have evidence of actual rates or amounts paid for the use of that technology. Relative to differences in technology between the patent in suit and “comparable” licenses, any litigation

related influences may be minor by comparison. The need for licenses that reflect actual arms-length negotiations (whether in settlement of litigation or not) is further amplified in situations where the patent relates to a small portion of a much larger product. Here again, we believe that more information is better than no information, especially when it is presented by experts who are aware of the potential complications surrounding SLAs. While this analysis has so far focused on reasons why SLAs should not be excluded from consideration, in the next section we provide specific issues that should be considered by experts in weighing the advantages and disadvantages of considering SLAs.

VIII. Negotiated vs. Court Mandated Royalty—a Model

Given that patent litigation is an expensive undertaking, any royalty amount negotiated prior to a court verdict may be meaningfully influenced by the anticipated cost of future litigation. As discussed earlier, this is true whether the negotiation occurred prior to or after the filing of a lawsuit (*i.e.*, SLA or NSLA). We present here a model we think can be useful in looking at the influence that litigation cost may have in reaching a negotiated settlement. To initiate this discussion, consider the following model: Say there are two parties, a risk-neutral patent-holder (“H”) and a risk-neutral alleged patent-infringer (“I”).¹⁹ A potential patent-infringer would agree to settle a case (or reach a negotiated amount) if,

$$R_s < p_I R_C + C_I \quad (1)$$

18. Consider a situation where the evidence in the case includes licenses for actual patent(s)-in-suit (a relatively common occurrence), but those licenses are SLAs. If the only other licenses available are for technologies of questionable comparability, *a priori* elimination of all SLAs from consideration is unwise. Recently, in *Resqnet.com, Inc. v. Lansa, Inc.* (*Resqnet.com, Inc. v. Lansa, Inc.*, 594 F. 3d 860 (2010), in III(B), the court did conclude that “...the most reliable license in this record arose out of litigation”). A prudent approach would be to allow consideration of the most reliable evidence by each party’s experts that will have to defend their reliance or rejection of the evidence in the course of forming their opinion. To further the example along the lines discussed above, what if the SLA for the patent(s)-in-suit actually occurred after a trial verdict where validity and infringement was already found. In such a situation, dismissing the evidence as irrelevant or fatally flawed would likely be a disservice to the goal or accurate, reliable, economic analysis.

19. This could include an “alleged infringer” in the case of settlements after a third party has adopted the technology in question, or just a “potential licensee” that has yet to adopt the technology in question. For a similar analysis of settlement in general, see Bebchuk, Lucian Arye. 1984. “Litigation and Settlement under Imperfect Information,” *Rand Journal of Economics*, 15(3) (Autumn), 404-415.

17. See, for example, Chapman, 2009; and Degnan, Stephen A. & Corwin Horton. 1997. “A Survey of Licensed Royalties,” *les Nouvelles*, 32(2) (June), 91-96.

where R_S is the present value of settlement royalty payments,²⁰ p_I is the alleged infringer's expected probability of losing the case, R_C is the expected present value of royalty payments from a court verdict on damages, and C_I is the cost of future litigation to the alleged infringer.

Similarly, a patent-holder would agree to settle a case if,

$$R_S > p_H R_C - C_H \quad (2)$$

where p_H is the patent-holder's expected probability of prevailing in the case, and C_H is the cost of future litigation to the patent-holder.²¹ Combining (1) and (2), a condition for settlement is that,

$$p_H R_C - C_H < R_S < p_I R_C + C_I \quad (3)$$

In general, the conditions of (3) are more likely to be met, *i.e.*, a settlement is more likely, as the right-hand side ($p_I R_C + C_I$) increases and the left-hand side ($p_H R_C - C_H$) decreases. Thus, a settlement is more likely: (a) the higher the alleged infringer's expected probability that the patent-holder would win the case (p_I), (b) the lower the patent-holder's expected probability of winning the case (p_H) and (c) the higher the cost of future litigation for either party (C_I and C_H).

There are several other important implications that follow from (3). When the stakes are high (*i.e.*, high value of R_C) relative to future court costs (C_H and C_I), then the probability assessments of the patent-holder winning the case (p_H and p_I) drive the model (*i.e.*, affect the likelihood of settlement) and litigation costs would normally play little or no role in the settlement. This explains why litigation may be necessary to reach a settlement by causing a convergence of perceived outcomes to occur.

When the probability of patent-holder's litigation success is low (P_H and P_I) and/or R_C is low, then the

litigation costs may play a much larger role in the settlement amount.²² For example, this describes the situation where an alleged infringer pays a settlement amount, even when they ascribe little or no value to the patent simply to avoid the cost of future litigation. Note, that even in situations like this, where the cost of litigation heavily influences the settlement license, important information is nonetheless conveyed about the value of the patent.

Another important implication of this model has to do with the timing of settlements. Since court costs are sunk, as one moves through the litigation process (from "B" through "E" in Figure 1), future litigation costs, C_I and C_H would decline. This is expressed mathematically as,

$$\frac{\partial C}{\partial t} < 0 \quad (4)$$

where t is time. Thus, as the litigation process moves forward from "B" to "E" in Figure 1, the future litigation cost components move toward zero. In other words, SLAs occurring toward the right-hand-side of our Figure 1 are less likely to be influenced by the future cost of litigation.

There are numerous nuances and scenarios that could be examined with respect to the model, but those are beyond the scope of this current endeavor. We wish to present the basic construct, however, because we believe it offers useful insights into our discussion of consideration of SLAs—particularly how litigation costs may influence the outcome of licensing negotiations for either SLAs or NSLAs. We believe this model provides an important framework for consideration by experts who wish to evaluate the costs and benefits of using SLAs in their analysis.

IX. Conclusion

The exclusion of SLAs by the courts seems artificially limiting. Since fact finders can access, evaluate and analyze information—including contextual factors surrounding settlements—we argue here that courts should allow for consideration all relevant information, including SLAs.

We have shown here that NSLAs and SLAs share many common characteristics. In fact, when comparing information availability for 10 relevant factors of consideration (Table 1), we argue that SLAs and NSLAs generally have similar levels of information availability and uncertainty.

In this analysis, we provide a "Licensing Negotiations Continuum" framework for analysis (Figure 1). Since litigation is always (at least potentially) a threat, we argue that the Licensing Negotiations Continuum framework is a useful way to approach and analyze

20. The present value could be derived from a one time, lump-sum royalty, or a stream of running royalty payments. Theoretically, as long as information is available to reliably estimate expected accused revenues and uncertainly about future royalty streams (through discounting and/or other methods) the two royalty structures are identical. As noted in Lu (2010) (footnote supra, p. 160), "Simply put, the method of payment does not really matter. Borrowing the analogical interpretation of Modigliani-Miller Theorem, the size of the pie; in this case, a licensor's share in technology value; has nothing to do with how it is sliced."

21. Note that the patent holder may have a different view of RC than the alleged infringer. For simplicity here, we assume any such differences are included in PH and PI.

22. As noted by the U.S. Court of Appeals Sixth Circuit case, *Panduit v. Stahlin*: "License fees negotiated in the face of a threat of high litigation costs may be strongly influenced by a desire to avoid full litigation" (Panduit, 575 F. 2d at 1164, n. 11).

this question. Further, the Licensing Negotiations Continuum framework demonstrates that cutting off SLAs from consideration is inconsistent with the accumulation of additional information and lessening of future litigation costs that occurs as one moves through the continuum.

We discuss seven common reasons why SLAs have been excluded from consideration by the courts and offer a response to each one. We provide three more reasons why SLAs should be considered, namely (a) they confer potentially valuable information, (b) they provide a valuable cross check against other approaches (*e.g.*, “comparable” licenses), and (c) they

are often the only source of real world royalty transactions for the patents in suit. As such, we believe SLAs should be allowed for consideration.

We conclude our analysis by providing a model to analyze the settlement process. We briefly examine how the model can be used to assess the influence that the cost of litigation may play in the outcome of negotiated licenses (either SLAs or NSLAs). In so doing we demonstrate that methods exist for taking into account one of the main objections to the use of SLAs (*i.e.* the cost of litigation) and that SLAs may indeed provide valuable and unique information important to reaching a reasonable royalty conclusion. ■