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September 10, 2012

The 25 Percent Rule in Patent Damages: Dead and Now Buried

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The United States Court of Appeals for the Federal Circuit's (CAFC) 4 January 2011 ruling in *Uniloc USA, Inc. v. Microsoft Corp.* ("Uniloc") marked an important change in patent infringement litigation. The CAFC ruling unequivocally rejected use of the long-standing "25 Percent Rule" in determining patent damages, calling it "a fundamentally flawed tool for determining a baseline royalty rate in a hypothetical negotiation" and a "rule of thumb" whose application "fails to meet the *Daubert* standard for admissibility." The CAFC ruling noted that the 25 Percent Rule has "met its share of criticism" primarily for failing to account for the specific facts of the case.[1] Many economists have criticized the continued use of the rule in determining reasonable royalty damages, but NERA economists, in particular, have strongly advocated abandoning fact-free shortcuts such as the 25 Percent Rule in favor of a structured and rigorous approach to damages estimation.[2] The CAFC explicitly cited two NERA economists in support of its opinion in *Uniloc*.[3]

Following the CAFC's ruling, in January 2011 Uniloc petitioned the court for a panel rehearing and rehearing *en banc*, and filed an *amici curiae* brief from ten patent damages experts.[4] In May 2011, the CAFC summarily rejected Uniloc's petition, affirming the court's prior ruling,[5] thus burying for good the already slain "fundamentally flawed" 25 Percent Rule.

The amici brief asserted that the 25 Percent Rule—based on the premise that a "patent licensee may consider paying the licensor approximately ¼ of its expected operating profits for the IP necessary to manufacture and sell the product, with the licensee retaining ¾ of the profits"—is a valid tool because it:

- rests on a "solid foundation;"
- "can provide useful insights into" royalty damages "where more precise information on the incremental benefits are unavailable;"[6]

- "provides at least some basis" for determining the appropriate royalty "where infringement of a patented technology provides incremental benefits that are difficult or even impossible to quantify;"[7]

- can be used as a credible alternative to other (fact-based) approaches to estimating damages in some situations;

- is as good as anything, because "*some* assumption regarding the proper allocation of profits between the patentee and the alleged infringer is unavoidable in reasonable royalty analyses;"[8] and

- can be valuable because it suggests a split of profits (allegedly "based on empirical evidence and business experience") whereby the licensee retains "the majority of the benefit."[9]

In defending the 25 Percent Rule, the amici brief suffers from the same inconsistencies and other problems associated with earlier rationalizations of the rule. Defenders of the rule claim that it is based upon incremental benefits of incorporating a patent into a product,[10] but it actually uses the total operating profits on the *entire* product in calculating the appropriate payment to the licensor. The brief also cites the dubious empirical evidence that was the original and continuing basis for the rule.

It is important to remember that a royalty is a price for the use of a patented technology agreed upon between a licensor and a licensee in a hypothetical royalty negotiation. This price is based primarily upon the incremental value of the patented technology to the licensee and the incremental cost of licensing to the licensor. The fundamental problem with the 25 Percent Rule is that it is unrelated to both the value of the patented technology and the relative bargaining power of the two parties. The Amici's arguments in defense of the rule fail to recognize that using a *generic* rule of thumb to arrive at the correct reasonable royalty outcome in any *particular* situation cannot work because the 25 Percent Rule simply does not eliminate the need, nor is it a substitute, for determining the incremental costs and benefits from the alleged use of the patented technology.

Like a broken clock that will be right twice a day, the 25 Percent Rule can be right only by accident. There is no reason—theoretical or empirical—that every licensor's and licensee's relative contributions will always yield what amounts to a 25/75 percent split of operating profits, even as a starting point in the negotiation.[11] Furthermore, as the amici brief itself points out, the 25 Percent Rule is merely a "Profit Split Rule,"[12] and, as a result, cannot provide any "useful insight" into *quantifying the amount of profits* to be allocated.

What Comes Next? A Structured Approach to Damages Estimation

In the wake of *Uniloc*, courts will no longer accept oversimplifications and deeply-flawed shortcuts in determining patent infringement damages. Instead, economic theory and common business practices provide robust guidelines for determining both the incremental benefit to be shared and the split of that benefit between the parties.[13] This determination typically begins with identifying the next-best alternative to the patented technology which, *depending on the specific facts of the case*, may come from a possible design-around or from the available prior art. In most general terms, these guidelines suggest that, all else equal:

- Patents with no readily available alternatives or with only very costly alternatives would command higher royalty rates than patents that provide little or no incremental value relative to the next-best non-infringing alternative.

- A patent owner with limited bargaining power would earn lower royalty rates than a patent owner in a stronger bargaining position. The specific facts in each situation would determine where on this spectrum the royalty in a given case would fall.

The *Uniloc* decision reaffirms the need for case-specific analysis of reasonable royalty damages. NERA economists have long been performing this type of case-specific analysis by using the following structured two-step approach:

1. We first determine the "bargaining range" in a particular situation by identifying the licensee's expected *incremental* profits from selling a product incorporating the patented technology rather than selling an otherwise-identical product that uses the next-best non-infringing alternative technology. When properly measured, the incremental profit to the licensee from using the patented technology provides the *maximum* royalty acceptable to the licensee (*i.e.*, the ceiling of the bargaining range). Similarly, the incremental cost to the licensor from licensing the patented technology provides the *minimum* royalty acceptable to the licensor (*i.e.*, the floor of the bargaining range).

2. If there is a negotiating range (*i.e.*, when the *minimum* royalty acceptable to the licensor is in fact lower than the *maximum* royalty acceptable to the licensee), we determine the appropriate profit split between the licensor and the licensee—that is, where within the bargaining range the reasonable royalty falls—based on the relative bargaining power of the parties, and on any other economic considerations that may arise *in each specific situation*.

Such a tailored approach will *always* provide more useful information about the outcome of the hypothetical license negotiation in a given case than the application of any generic one-size-fits-all "rule of thumb." Even if it were impossible to identify the expected incremental benefits from the licensee's use of the patented technology, applying the 25 Percent Rule would still be no better than making any other random guess. The fact that the rule may provide the average royalty rate (across some anecdotal set of unrelated license agreements from various industries covering bundles of intellectual property rights) does not guarantee that it is the right rate for *any* specific circumstance. Indeed, the average roll of a standard six-sided die yields 3.5 dots; yet if one is tasked to predict the outcome from a single die roll, a prediction of 3.5 is *guaranteed* to be wrong.

In conclusion, we applaud the CAFC's continued rejection of ad hoc methods and desire for more rigorous economic analysis in the determination of patent damage awards.

Notes

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[1] Appeal from the United States District Court for the District of Rhode Island in Case no. 03-CV-0440, Judge William E. Smith, *Uniloc USA, Inc et al. v. Microsoft Corp*., 4 January 2011, pp. 38-9.

[2] See, for example, Alan Cox and Stephen Rusek, "The Demise Of Junk Science And The 25% Rule, *Law360*, 28 July 2010, also available at *http://www.nera.com/nera-files/PUB_Demise_Junk_Science_0710.pdf*; Elizabeth M. Bailey, Alan Cox and Gregory K. Leonard "Three Cases Reshaping Patent Licensing Practice," *Managing Intellectual Property*, 1 March 2010, pp. 3-5, also available at *http://www.nera.com/nera-files/PUB_ManagingIP_Mar2010.pdf*; and Christine Meyer and Bryan Ray, "A Critique of Noneconomic Methods of Reasonable Royalty Calculation," Chapter 5 in *Economic Approaches To Intellectual Property*, Gregory K. Leonard and Lauren J. Stiroh, National Economic Research Associates, Inc., eds., 2005.

[3] *See* Appeal from the United States District Court for the District of Rhode Island in Case no. 03-CV-0440, Judge William E. Smith, *Uniloc USA, Inc et al. v. Microsoft Corp*., 4 January 2011, p. 38: "[The 25 percent Rule] fails to account for the unique relationship between the patent and the accused product. See Gregory K. Leonard and Lauren J. Stiroh, *Economic Approaches to Intellectual Property Policy, Litigation, and Management*, 949 PLI/Pat 425, 454-55 (Sept.-Nov. 2008) ("[The 25 percent rule] takes no account of the importance of the patent to the profits of the product sold, the potential availability of close substitutes or equally noninfringing alternatives, or any of the other idiosyncrasies of the patent at issue that would have affected a real-world negotiation.")"

[4] Brief of *Amici Curiae* Damages Experts in Support of Uniloc's Petition for Rehearing, *Uniloc USA, Inc et al. v. Microsoft Corp*., 21 March 2001 ("amici brief").

[5] On Petition For Panel Rehearing and Rehearing en banc, *Uniloc USA, Inc et al. v. Microsoft Corp*., CAFC ruling, 16 May 2011.

[6] Amici brief, p. 4.

[7] The Amici claim that Uniloc's expert applied the 25 Percent Rule to the "incremental" benefits of the patented feature at issue (p. 6). However, neither the Amici nor the public record indicate that the patent covered the entire feature; every possible way of implementing the feature; or that there were no non-infringing alternatives. The profits associated with this feature could be an appropriate measure of the incremental profits flowing from the patented invention only if there were no other (non-infringing) cost-effective ways of providing piracy protection, and if the benefits of the feature could be implemented without any other technology or essential inputs. In general, all these points should be important considerations in determining whether the incremental benefits due to the entire feature provided an appropriate basis for calculating a reasonable royalty.

[8] Amici brief, p. 7.

[9] Amici brief, pp. 7-8.

[10] Amici brief, pp. 4-5.

[11] The amici brief claims that the appropriateness of a *universal* 25-75 percent profit split between the licensor and the licensee "has been examined and confirmed empirically." (Amici brief, pp. 1-2.) As pointed out in Cox and Rusek *op. cit*, this research is limited and questionable. They also point out that, even if reliable, these studies actually demonstrate that the rule does not hold and that there is no such thing as a "one-size fits all" approach. *See* Robert Goldscheider, John Jarosz and Carla S. Mulhern, "The Use of the 25 Percent Rule in Valuing IP," *Les Nouvelles* 123, 133, December 2002, (attached as Exhibit 1 to the amici brief). Moreover, all of the research cited by the amici brief in support of the 25 Percent Rule necessarily focuses on *published* royalty rates which are likely biased in favor of higher rates.

[12] Amici brief, p. 1.

[13] For example, one well-established economic model of bargaining demonstrates that the two sides in a bargaining situation will split the benefit of the bargain (*i.e.*, the incremental benefit of the invention) under certain assumptions relating to the parties bargaining positions. *See* Rubinstein, A. (1982), "Perfect Equilibrium in a Bargaining Model," *Econometrica*, 50:97-110.

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