When Standards Collide with Intellectual Property: A Teaching Guide on Standard Setting Organizations, Technology, and *Microsoft v. Motorola*

Cynthia Laury Dahl
University of Pennsylvania Law School

www.codes-and-standards.org

This material was developed under the auspices of the Penn Program on Regulation using federal funds under awards 70NANB15H343 and 70NANB15H344 from the National Institute of Standards and Technology (NIST), U.S. Department of Commerce. Any statements, findings, conclusions, and recommendations are those of the individual authors and do not necessarily reflect the views of the Penn Program on Regulation, the University of Pennsylvania, NIST, or the U.S. Department of Commerce.
INTRODUCTION

This teaching guide supports a course module that allows students to explore the interplay between regulatory law and intellectual property (IP) law, using a concept that is familiar from news coverage of high-profile patent cases. The scenario involves standard setting organizations (“SSOs”) and how their decisions can curtail companies’ otherwise valid patent rights. Through the lens of an actual case—Microsoft Corporation v. Motorola, Inc., et al.1—

1, The docket for the case is voluminous, but the most helpful opinion is the W. D. Wash. 207-page Findings of Fact and Conclusions of Law (redacted) at Microsoft Corporation v. Motorola, Inc. 2013 WL 2111217 (W.D. Wash. April 25, 2013). The Ninth Circuit appeals decision is at Microsoft Corporation v. Motorola, Inc. 795 F.3d 1024 (9th Cir. 2015).
students will learn how difficult it can be to license on “fair, reasonable and non-discriminatory” (FRAND) terms. The case, decided in 2015 at the Circuit level, raises many unanswered questions and affords students an opportunity to debate whether patent owners should rightly relinquish their ability to seek injunctive relief once their patent has been chosen as a standard essential patent (SEP). More broadly, students will be able to question whether it is in the public interest to limit patent rights in certain situations, or whether it is more important to guarantee broad rights as an incentive to innovate. The facts of the case also raise interesting questions involving the plaintiff’s right to bring a cause of action, how an infringer can recover attorney’s fees without proving “exceptional circumstances,” how to protect a party’s right to a jury trial when part of the case is decided by bench trial, and even whether the Ninth Circuit rather than the Federal Circuit should assert jurisdiction over a case involving patents, especially when it involves an injunction overseas. The instructor could explore any of these additional topics not specifically taken up in this module depending on time and interest.

I. GOALS OF THIS COURSE MODULE

The module aims to bring students without a technical or IP background up to speed quickly to debate the somewhat complicated but fascinating interplay between SSO regulatory bodies and IP rights. The introduction provided through a class session based on this module will be helpful to any student of intellectual property or regulatory law, and especially valuable to students who anticipate working in a high-tech setting or with high-tech clients. In addition, the module will give the instructor a vehicle to challenge some fundamental questions about our IP laws, including whether protection is necessary to incentivize innovation and the tension between the public’s need to use technology freely and an inventor’s right to protect her creative endeavors. This module is especially timely given the attention that technology litigation—often involving standard essential patents—is receiving in the mainstream press.

II. MATERIALS IN THIS COURSE MODULE

The materials listed below provide an instructor with all the resources needed to include this module on standard essential patents as a class session in their existing intellectual property class. All of these materials can be found online at www.codes-and-standards.org.

- Case study based on the *Microsoft v. Motorola* case  

- Videos  
  - Kirk Dailey (former Corporate Vice President of Intellectual Property at Motorola; currently Senior Vice President of Business Development at the Marconi Group)  
  - T. Andrew Culbert (former Associate General Counsel of Microsoft in charge of intellectual property litigation; currently Partner at Perkins Coie LLP and Lecturer at the University of Washington School of Law)  
  - Steven Fortney (former judicial clerk to Judge James L Robart of the
Western District of Washington; currently Partner at the Summit Law Group
  o Judge James L. Robart of the U.S. District Court for the Western District of Washington

- Teaching Guide (this document)
- PowerPoint presentation (optional – for use at the start of the class to emphasize concepts for auditory learners and to orient students who may not have completed the reading)

### III. PREPARATION FOR TEACHING

Before class, assign your students to a team (half Motorola and half Microsoft) and ask them to read carefully the case study. Portions or some or all of the videos may be used either before or after the class, as the instructor sees fit. The videos both clarify and build on the information provided in the case study. These videos may both explain some of the lingering questions as to the parties’ litigation strategy and also encourage students to think about the longer-term implications of the questions raised by the case study.

Explain to your students that they should consider the following three questions and come with factual support from the case study ready to defend their position on each of these, to be argued from the point of view of their client:

- **On what basis can Microsoft maintain a “breach of contract” or “breach of good faith and fair dealing” claim?** What are Microsoft’s damages?

- **Is a 2.25% royalty computed from the final purchase price of Microsoft’s products a “fair, reasonable and non-discriminatory” license rate for Motorola’s standard essential patents, or not?** If 2.25% is not a “fair, reasonable and non-discriminatory” rate, what would be?

- **Should Motorola be permitted to seek an injunction over Microsoft’s infringing use if the parties cannot come to an agreement on a bilateral license?**

You might ask them to submit their thoughts to you before class in written form—even just bulleted talking points—if you suspect they will not otherwise devote the requisite time to prepare.

### IV. RUNNING THE MODULE

To teach a class around the case study, you will want to take into consideration the amount of time available and how to allocate it, plus ways to manage the discussion. This part of the teaching guide provides you with insights about time management and a step-wise set of questions that you can use to guide discussion. In the final section, I offer general policy discussion prompts that can be used by the instructor as a concluding or supplemental discussion.

The suggestions contained in this part of the teaching guide are based on experience teaching the Microsoft v. Motorola case study many times. Of course, you should feel free to adapt the guidance offered here to meet your own interests and purposes.

A. Timing

This module assumes an 80-minute class. However, the last section below offers some recommendations on adapting the class for longer or shorter periods.

80-Minute Class

1) Begin by reviewing the PowerPoint slides. The slideshow is designed to last 15 minutes, including time to answer a few questions.
2) Divide the students into small groups (no more than four students per group, groups of three work best) and give the groups 10-15 minutes to discuss within the group their answers to the three bullet-point questions they were assigned for homework. Explain that you will call upon the groups to make a case for their client in 2 minutes or less on each question, so they should designate a spokesperson and be sure to have evidence to back up their position.
3) Reconvene. Call upon two different groups for each bullet point question, one group representing Motorola and one group speaking for Microsoft. For each bullet point question, after the two groups present their answers and evidence, put the question to the larger class for discussion. For an even more challenging discussion, introduce a few of the “Questions for Further Class Discussion” from each section. Allot 15 minutes for the royalty rate question, 10 minutes for the breach of contract question, and 10 minutes for the injunction question.
4) Use the final 15-20 minutes of class for overflow discussion from any of the bullet points, and to begin a broader policy discussion if desired. Broader policy questions are offered in Section V(C) for this purpose.

If there is more time

- Give the small groups 15 minutes to meet. Add more time onto the topical discussions and increase the number of broader policy questions at the last section of the class.

Alternative schedules for an 80-minute class
• Drop the PowerPoint in order to add time to the small group discussion and to each of the group discussions on the three topics; OR
• Drop the small group discussion to add time to the group discussions on the three topics. Although students will have more nuanced answers to contribute to the group if they have discussed the topics first with their peers, this does free up more time to hold the group discussion.

For a class of fewer than 80 minutes

Drop the PowerPoint and/or shorten or drop the small group discussion. However, for best results, do not limit the larger group discussion time, nor the final moments to put the discussion in context by discussing broader policy issues

B. Running the Discussion

This section is divided into three subparts, each corresponding to one of the three questions listed above to be assigned to the class to consider as part of class preparation. For each question, this teaching guide is further divided into three subsections. Subsection 1 outlines, again for each question, the answers that students representing each client might emphasize. Subsection 2 offers background for the instructor to help the class to explore the topics raised by that question in greater detail. Finally, Subsection 3 poses a few broader questions to deepen the discussion and force the class to think more contextually.

Question 1: On what basis can Microsoft maintain a “breach of contract” or “breach of good faith and fair dealing” claim? What are Microsoft’s damages?

1. Student Answers

Motorola: Members of the ITU do not sign a membership document. There can be no enforceable contract. Without an enforceable contract, there cannot be a breach. Further, since there is no enforceable contract, Microsoft cannot be a third-party beneficiary of the contract and has no claim.

Also, even if there is a contract between Motorola and either the ITU or the IEEE, there is an issue of whether the obligations of the contract are clear enough to maintain a cause for breach. For example, what exactly are “fair, reasonable and non-discriminatory” terms, especially if the SSO does not help to define them?

Further, Microsoft has no damages yet. Until Microsoft is enjoined because of patent infringement (and the patent infringement part of the trial has been stayed), Microsoft will not have suffered damages. For example, Microsoft shouldn’t be able to collect attorney’s fees for defending against an injunction in a patent infringement case until Microsoft can prove exceptional circumstances, which is the usual standard for patent cases. Further, Microsoft is asking for attorney’s fees to compensate it for defending
against an injunction awarded by a German court. Is that allowed?

As for damages stemming from the cost of relocating Microsoft’s shipping facility from Germany to the Netherlands, that was Microsoft’s business decision, made in order to avoid Motorola’s rightfully-adjudicated German injunction, which shut down Microsoft’s patent infringement. If Microsoft had negotiated a proper license with Motorola, it would not have had to incur that expense.

Microsoft: Besides the fact that members of the IEEE must sign a membership agreement, being a member of an SSO and taking part in the standard setting process sets up an implied contract to abide by the guiding documents of the SSO. Since the contract is bilateral between Motorola and each SSO, Microsoft cannot sue directly for breach. However, since Microsoft is also a member of each SSO, it has been operating in reliance that Motorola will abide by SSO guidelines, and Microsoft is also a third-party beneficiary of the contract. So, for both of those reasons, Microsoft has a claim for breach.

Even if the bylaws and guidance documents were not clear enough to establish a contractual relationship between Motorola and the SSOs, the fact that Motorola signed a Patent Statement and Licensing Declaration Form (in the case of the ITU) and a Letter of Assurance for Essential Patent Claims (“LOA”) (in the case of the IEEE) is an additional basis for a contract. As another member of the SSO, Microsoft relied on Motorola’s promise to license its SEPs on FRAND terms.

As for the clarity of the obligation that led to breach, the guiding documents state that a member has an obligation to license on fair, reasonable and nondiscriminatory terms. It is also clear that the SSOs do not decide what “fair, reasonable and non-discriminatory” means. So, the obligation is clear that the parties need to negotiate and execute a license, and that they are expected to arrive separately at an agreement on what would constitute FRAND terms.

Microsoft’s damages stem from the breach, not from the patent infringement case. Motorola’s seeking an injunction breached its duty to operate with good faith and fair dealing, which is a contract claim. Therefore, Microsoft has the right to seek damages resulting from that injunction, which includes the attorney’s fees to defend itself, and the cost of relocating its shipping facility out of Germany.

As to whether the U.S. court could consider damages resulting from an injunction imposed by a German court, the U.S. court should have jurisdiction because the German action involved some of the same patents that Motorola offered to license in the U.S. contract case.
2. **Background for Instructor**

*The Rulings from the Actual Case*

Judge James L. Robart of the *Microsoft v. Motorola* case first bifurcated the trial, separating out the patent infringement case from the breach of contract case.

He then issued orders addressing the preliminary questions of i) whether Motorola had entered into binding contractual commitments with the SSOs, and ii) whether Microsoft had standing to sue under those contracts, during summary judgment motions filed before the beginning of the trial. The court decided:

a. Motorola was contractually bound to license its SEPs on FRAND terms, by virtue of Motorola’s executing letters of assurance and declarations with the SSOs committing to license its SEPs on FRAND terms; 

b. Microsoft had standing to sue as a third part beneficiary to Motorola’s contracts with the SSOs.

3. **Questions for Further Class Discussion**

*Should a patentee’s seeking an injunction really be a factor in deciding whether or not there was a breach of contract (especially, as with the ITU, when there is no ban on injunctions specifically spelled out in SSO guideline documents)?*

*Ask the groups that represent Motorola: How can you protect your client if they have to open up a FRAND negotiation by suggesting licensing terms? Is there any way to prevent a would-be licensee from going to a court claiming “breach of contract” and “breach of good faith and fair dealing” if they simply don’t like the offer?*

*If a would-be licensee can use a breach of contract claim to ask the court to set a FRAND rate, which previously was done through a patent infringement lawsuit, does that preserve the would-be licensee’s ability to use patent defenses (e.g. that the patent is not essential, not valid or not infringed) for a later time? Should a would-be licensee be able to maintain those defenses, or would that be taking “two bites at the apple?”*

*When deciding damages for a breach of contract, should the court consider whether plaintiff has actually engaged in holdup? Should presenting evidence on actual holdup and royalty stacking be mandatory in these FRAND cases?*

*How can you tell if there has been holdup unless you know what the patent is worth? Doesn’t determining value for purposes of damages raise the same problems as determining value for purposes of deciding FRAND rates?*

---


4 *Id.*
Question 2: Is a 2.25% royalty computed from the final purchase price of Microsoft’s products a “fair, reasonable and nondiscriminatory” license rate for Motorola’s standard-essential patents, or not? If 2.25% is not a “fair and reasonable” rate, what would be?

1. **Student Answers**

   **Motorola:** Yes.
   
   a. The comparable licenses Motorola presented had similar terms. [Perhaps students could list each and discuss why relevant]
   b. The Motorola standard essential patents (both video compression and wi-fi) are valuable to the standard and used by very popular Microsoft products.
   c. A 2.25% royalty fee is only a small percentage of the whole price of the product.
   d. The 2.25% royalty was only the starting price in the negotiation; so long as the opening offer was made in good faith, only the final agreed-upon license terms, not the opening offer, must be FRAND.5
   e. Wi-Fi patents allowed Microsoft to enhance their Xbox consoles and sell Kinect systems, so the Motorola patents increased the value of Microsoft’s separate Kinect product (relevant to *Georgia-Pacific* Factor 6). Microsoft could not have had that success without Motorola patents enabling Wi-Fi. The 2.25% royalty is not only reasonable; it might even be low.
   f. Video compression patents are key technology for both Xbox and Windows. Although the specific Motorola video compression technology is a little old, the videos it compresses are still in the market.
   g. Motorola deserved a royalty that would be a percentage of Microsoft’s whole unit price because in each case the patents are indispensable to the value of the whole product. It is the Kinect functionality that makes the new Xbox valuable and Wi-Fi is critical to Kinect. Similarly, a computer cannot function without the Microsoft operating system, and video compression technology is an important part of the operating system.

   **Microsoft:** Not even close.
   
   a. Motorola patents are not that important to the standard nor to Microsoft’s products. For H.264, Motorola’s integrated video compression is an old technology applicable only to older videos. This tech becomes less relevant every day. For 802.11, the parties disagree on whether the Xbox even uses Motorola’s patents. Even if it does, the patents are over older technologies that the Xbox does not use often. In addition, Wi-Fi is only a very small part of what makes Xbox so valuable; the Xbox can connect to the internet through a landline as well.

---

5 *Microsoft v. Motorola*, at 5.
b. The process of negotiating bilaterally encourages “stacking” because each negotiation is done separately with no reference to the other licenses needed. Microsoft could not pay 2.25% of the price of the end product for every essential patent it needed to license. It would be much fairer to calculate the rate based on comparable rates from patent pools, because in that scenario, parties do their licensing in reference to all other licenses needed and cap the total royalty.

c. Rates shouldn’t be calculated as a percentage of the total price of the end product because the patents more accurately add value to the component rather than the whole (for 802.11 the component should be the Xbox Kinect add-on, or perhaps even only the Wi-Fi capability; for H.264, the Windows component should be the Windows OS, or more likely just the video functionality of Windows, and in the case of the Xbox, the component should be the chip that controls video processing, and only to the extent the chip still processes integrated videos). In the alternative, a royalty could be a flat per unit fee that does not rely on either a component or total end product price.

d. Motorola’s valuation of its patents in the abstract is also overstated; there are likely alternatives. Motorola is basing the royalty rate not on the inherent value of the patents, but on the inflated value the patents have gained by virtue of being included in the standard.

2. Background for Instructor

After Judge Robart decided the issue of whether there had been a contract (among many other motions), he turned to the breach of contract claim:

a. The Two-Part Trial. Judge Robart divided the proceedings on the breach of contract claim into two parts. He decided that before a jury could decide whether Motorola had breached its contract to Microsoft to provide a license at a FRAND rate, he would first have to determine in a bench trial what a FRAND royalty rate and reasonable range might be. Then the jury could compare that rate and range to Motorola’s offered rate and determine if Motorola’s offer was so different from the FRAND range that it had constituted a breach of contract.

i. The bench trial: After setting up a careful structure (detailed below) and then running the analysis, Judge Robart concluded the following rates were FRAND:

1. For the H.264 patents, the rate was **0.555 cents** per unit, with a range of 0.555 cents to 16.389 cents per unit for use in Microsoft Windows and Xbox products;\(^6\)

   2. For the 802.11 patents, the rate was **3.471 cents** per unit, with a range of 0.8 cents to 19.5 cents per unit as used in the Microsoft Xbox.\(^7\)

\(^6\) The royalty rate for all other products using the H.264 standard was 0.555 cents per unit.

\(^7\) The royalty rate for all other products using the 802.11 standard was 0.8 cents per unit.
In contrast, for example, Motorola had asked for the equivalent of $3.00 to $4.50 per XBox for a license to the 802.11 SEPs alone by quoting a license rate of 2.25% of the end product price.\(^8\)

Judge Robart also recalibrated the royalty calculation approach completely, from Motorola’s original offer to take a percentage of Microsoft’s end product price to a flat per unit fee. He rationalized it this way, “[A] patent’s royalty rate should be based in the importance of the patent to the standard and to the implementer’s product. Under this analysis this royalty rate would fluctuate little, if at all, based on the end selling price of the product.”\(^9\)

ii. The jury trial: After he determined a FRAND rate and range, Judge Robart passed the case to the jury to decide on the claim of breach and damages. The jury was allowed to consider Judge Robart’s calculation of proper FRAND terms. Finding breach of contract, the jury awarded Microsoft damages of “\(\$14.52\) million: \(\$11.49\) million for relocating its distribution center and \(\$3.03\) million in attorney’s fees and litigation costs.”\(^10\) The jury decided that Motorola had breached a contractual commitment to the SSOs and that by seeking injunctive relief, Motorola had violated a duty of good faith and fair dealing.\(^11\) The district court also denied Motorola’s motions for judgment as a matter of law, stating that there was sufficient evidence for a jury to conclude that Motorola breached its duty of good faith and fair dealing through both making offers that were not FRAND and by seeking injunctions.\(^12\) Much of this evidence supported a position that Motorola had intentionally “held-up” Microsoft for higher license fees than were reasonable.

b. The Appeal. The Ninth Circuit upheld the FRAND analysis on appeal, saying that “in determining the [F]RAND rate and range for each SEP portfolio, the district court engaged in a thoughtful and detailed analysis, giving careful consideration to the parties' briefing and evidentiary submissions, and to the testimony.”\(^13\) The Ninth Circuit not only supported the district court’s result, but it supported the district court’s procedural decision to establish the rate through a bench trial, the process of using modified Georgia-Pacific factors to arrive at the rate that the parties would have established in a hypothetical

---

\(^8\) In addition, this fee amount is understated because in his calculation, Motorola’s expert subtracted out potential moneys for Motorola to cross license Microsoft technology. See pgs. 130-131 of the Findings of Fact.


\(^10\) Microsoft Corp. v. Motorola, Inc. et al., 795 F.3d 1024 at 1034 (9th Cir. 2015), quoting the jury verdict form.

\(^11\) Id.

\(^12\) Id.

\(^13\) 795 F.3d 1024 at 1044.
negotiation, and the evidentiary weight it gave the parties’ expert evidence and proffered alternative licensing agreements.

What Process Did the District Court Use to Arrive at Proper FRAND Terms?

Overall, Judge Robart attempted to create the hypothetical license negotiation that would have taken place at the time the infringement began, which he interpreted as just before Motorola’s SEPs were incorporated into the standard. First, in order to figure out the approximate value of the patents, the court analyzed two things: i) how important the Motorola SEPs were to the 802.11 and H.264 standards; and then ii) how important both the Motorola patents and the 802.11 and H.264 standards themselves were to the Microsoft products. Once the court had determined the relative importance of each patent, the court looked at comparable licensing negotiations (including other contracts and patent pools) to set a price range.

The procedure was guided by the Georgia-Pacific factors (as the court had modified them for FRAND circumstances) and expert testimony. The court was guided especially by G-P factor 1 (comparable royalties received by patentee), 7 (duration of the patent), 9 (alternative technologies), 10 (nature of the patented invention and benefits to the licensor), 11 (extent of use by the infringer), 12 (customary practice in the industry for licensing the SEPs), 14 (expert testimony), and 15 (the terms of a hypothetical negotiation considering the SEP context). The court also emphasized how important it was to avoid “stacking” and “hold-up,” and thought that the structured analysis framework it had developed would effectively address those issues.

In order to meet the first step of the analysis and figure out the value of the Motorola SEPs to the 802.11 and H.264 standards, the court tried to place the patents into context. The court looked at factors including the total number of patents in the standard, Motorola’s role in the SSO and in particular to developing the standards, measurable advantages the SEPs contributed to the standard, and whether or not there were alternative technologies at the time the standard was developed.

As to the second step of the analysis, the court took into account whether the Microsoft end products actually used the SEPs themselves, not just the standard overall.

After determining patent value separately, Judge Robart turned to comparable licenses offered by both parties to decide what the market would expect to pay to license such SEPs. Comparables could be used to support Georgia-Pacific factors 1, 2, 12 and 15. However, Judge Robart leaned much more heavily on Microsoft’s comparable

---

14 The Georgia Pacific factors, as modified for FRAND circumstances by the court, are reprinted as Exhibit 4 of the Case Study.
16 Microsoft v. Motorola at *53-64.
licenses rather than Motorola’s. He discounted the relevance of Motorola’s comparable licensing agreements, and instead relied on a number of patent pool arrangements, another license, and a consulting patent valuation report offered by Microsoft. However, realizing that especially the patent pool license rates likely understated the proper license fee (because patent pool members also gain a benefit in being able to cross license other members’ patents), he adjusted the rates by multiplying them by three to arrive at his FRAND rate.

*Why Did Judge Robart Discount the Evidence of Motorola’s Comparables?*

Judge Robart dismissed Motorola’s comparables because he claimed that they were negotiated outside of a FRAND context.

a. The license with VTech Communications did not carry weight as a comparable license because it included unrelated patents in the deal, and the license was mostly entered in order to settle infringement claims. The timing and execution of the license was also suspect because it was signed just before an ITC hearing where Motorola relied on the license to prove the reasonableness of its Microsoft license demands. The court also noted that VTech had only paid “very little” under the agreement to date.\(^\text{17}\)

b. The RIM license also included several other patents besides the 802.11 and H.264 relevant patents, even including non-SEPS. The court could not separate out the value of the 802.11 and H.264 SEPs. In fact, since an earlier license agreement had given the same rate for a similar list of patents that excluded the 802.11 and H.264 SEPs, the court suspected the value of the SEPs might be negligible. This license situation was also not comparable to a FRAND situation because the agreement was executed to settle a threatened infringement suit and was subject to a royalty cap.\(^\text{18}\)

c. The Symbol Technologies licenses were not relevant because two were entered into under duress of litigation, and they involved different patents that had expired before Microsoft’s alleged infringement, and the last license also included patents that had expired and required a much lower total payment than the 2.25% royalty that Motorola sought from Microsoft.\(^\text{19}\)

*What Other Analyses Have Courts Used to Approximate the Value of a Negotiated License?*

Although *Microsoft v. Motorola* was the first case actually to calculate suggested FRAND royalty rates and ranges for SEPs, other courts and juries have also had to rely on various methodologies to ascribe a monetary value to SEP portfolios. In

\(^{17}\) *Motorola v. Microsoft* at *132, *135.

\(^{18}\) *Id.* at *135-140.

\(^{19}\) *Id.* at *141-145.
order to show students how complicated the analysis can be, mentioning or explaining the pros and cons of these methodologies might be beneficial.\(^\text{20}\)

a. **Incremental Value Rule** – Proposed as the proper valuation methodology by Microsoft in *Microsoft v. Motorola*, it calculates a license fee based on the value of the technology over the next best alternative. The rationale is that licensee should only have to pay each patent holder for the value of their improvement over alternative technologies. Judge Robart thought the methodology was unworkable because it required multilateral ex ante negotiations, which are forbidden by many SSOs on antitrust grounds\(^\text{21}\) and because it would be hard to identify alternative technologies that would be truly comparable both because different parties value technologies differently and because substituting one technology for another might alter the rest of the standard. He also thought that the purpose of the incremental value rule was met through considering *Georgia Pacific* factor 9, which encourages considering the advantages of the SEP over alternative technologies. Therefore, the analysis behind the incremental value rule can be one of several factors to consider, instead of being the driving factor to assign value to an SEP.

b. **Top-Down Analysis**: Followed by a different district court in *Innovatio IP Ventures LLC Patent Litigation*,\(^\text{22}\) this methodology calculates the license fee by starting with the selling price of the good, isolating a reasonable profit, and then apportioning a percentage of the profit to the SEP owner in proportion to the number of SEP patents it owns as a percentage of the total number of SEPs in the standard. One problem with this methodology, however, is that as with a patent pool, all patents are treated equally; it does not allocate a higher license rate to a higher value patent.

c. **Bottom-Up Analysis**: Proposed by a party (and rejected by the court) in *Innovatio*, this valuation methodology calculates a per unit license fee by first isolating the cost of implementing reasonable alternative technologies that could have been adopted into the standard and then dividing by the number of infringing units. The court rejected the approach because it could find no reasonable alternatives to the technology and also approved of Judge Robart’s assessment that methodologies that depended on substituting alternative technologies were unworkable.

d. **Ex Ante Benchmarking**: Proposed by Judge Richard Posner\(^\text{23}\) in *Apple v. Motorola*,\(^\text{24}\) this valuation methodology decouples the patent from the rest of

---

21 Motorola v. Microsoft at *26.
23 Circuit Judge Posner was sitting by designation in the District Court.
24 869 F.Supp.2d 901 (N.D. Ill. 2012). The case was later vacated in part, affirmed in part, and remanded in part by the Federal Circuit on other grounds.
the SEP portfolio to focus on determining the value of the patent at the time of a hypothetical negotiation between the parties, just before the patent was adopted into the standard. This would ensure that the license fee does not take on any of the value conferred to the patent by virtue of its being adopted into the standard.²⁵

What did it mean for the Microsoft v. Motorola court to appropriately modify the Georgia-Pacific factors?

The Microsoft court knew that some of the Georgia-Pacific factors did not apply at all to a FRAND situation (for example, factors 4 and 5) and that several others needed to be altered to take FRAND concerns into account. The Microsoft court modified the factors to make it clear that i) when the court would consider outside resources as a reference, those outside resources would involve FRAND circumstances; and ii) whenever calculating the value of the patent, the court would attribute value only to the patent itself and not to the value conferred on the patent from merely being adopted into the standard. The modifications are summarized below. The full list of factors, together with modifications added in brackets at the end of the factors, are in Exhibit 2 to the Case Study.

Modifications the Microsoft court made to the Georgia Pacific factors:

a. For Factor 1 - make sure that comparable licenses were negotiated under FRAND circumstances
b. Delete Factors 4 and 5.
c. For Factors 6 and 8, ensure take into account only the value of the patent itself, not the value added because it was incorporated into a standard.
d. Give Factor 7 low relevance, since the term of the license is co-extensive with the duration of the patent.
e. For Factor 9, only consider alternatives that could have been incorporated into the standard at the time it was implemented.
f. For Factor 10 and 11, only take into account the value of the patent itself, not the value added because it was incorporated into a standard.
g. For Factor 12, only take customary practice regarding FRAND-licensed technologies into account.
h. For Factor 13, only take into account the value of the patent itself, not the value added because it was incorporated into a standard.
i. For Factor 15, make sure it takes the value of the SEPs to the licensee into account to avoid hold-up, and consider in the context of the other potential SEPs, to avoid stacking.

²⁵ Id.
3. **Questions for Further Class Discussion**

Why is deciding “Fair, Reasonable and Non-Discriminatory” so difficult?

a. How do you really determine value of the patent to the standard, and value of the standard to the product?

b. There are many G-P factors, and as Judge Richard Posner stated in *Apple v. Motorola*, they are ambiguous, a court could not know “how many additional factors may be lurking somewhere,”26 and he questioned whether “a judge or jury [could] really balance 15 or more factors and come up with anything resembling an objective assessment?”27 For example:

   i. How can you separate out the value of the patent from the value conferred upon it by virtue of it being adopted into the standard?

   ii. What exactly are you licensing? Just essential patents for necessary functionality, or also optional or implementing functionality, over how many countries, and for how long?

   iii. How do you determine which exactly are alternative technologies? Does it matter if the alternative technologies are patented?

   iv. Did the alternative technologies have to have been available at the time the standard was implemented in order to be considered? Did the alternative technologies have to have been actually considered by the SSO?

*Does the Microsoft v. Motorola court’s process for computing FRAND terms make sense to you? Do some of the other tests seem fairer? Do you think any of the processes favor either of the parties more than others? Do you favor a combined test?*

a. Should you base patent value on the number of other patents in the standard? What else?

b. Once a court decides on the total amount of money that should be paid for royalties (Factor 12) should the court divide the money equally, or somehow give a weighted value to certain patents? What about if some of the patent owners elect to grant free licenses to users? Should their patents be taken out of the royalty analysis? How can you decide how much of a royalty as a percentage of the whole to designate for which patent?

c. [For groups representing Microsoft] If it becomes the norm that the would-be infringer has to substantiate accusations of patent hold-up and royalty stacking before that can be taken into account in the analysis of an appropriate royalty, how could Microsoft do that in this case?

*Can there ever be a truly “comparable” license for benchmarking purposes?*

a. Are patent pools a good proxy?

b. Why aren’t settlement agreements a good comparable? Aren’t SEP negotiations similar to settlement agreements in that the alleged infringer cannot walk away from the deal?

---

27 *Id.*
Is it better to impose a flat royalty fee per unit or to try imposing a royalty as a percentage of the whole? Courts have decided that if you do the latter, that the royalty base should be the “smallest saleable patent practicing unit,”[28] but what does that actually mean?

How do you tell if a patent is implemented by the entire device or merely a component part?

When considering a hypothetical negotiation for purposes of calculating a proper royalty rate, is it fair to consider present-day value of the patented technology? How is that relevant if the court is trying to decide what the parties would have negotiated before the alleged infringement took place?

Question 3: Should Motorola be permitted to seek an injunction over Microsoft’s infringing use (without being accused of breach of contract) until the parties can come to an agreement on a bilateral license?

1. Student Answers

Motorola. Absolutely.

Without the ability to threaten an injunction, defendants have no incentive to license SEPs quickly, if at all. Defendants could string out a negotiation for months or even years, all the while continuing to sell their products and benefitting from the owner’s patented technology without accounting for their infringing use. A patent owner is already receiving less in licensing revenue than it could probably get through a bilateral negotiation, especially for a very valuable patent over an essential element of a standard. Removing the ability to seek an injunction really devalues the patent.

Microsoft. No.

When patented technology is adopted into a standard, it already confers additional value and market power to a patent owner. When that patent owner is also able to enjoin parties that are forced to use their standard essential technology from producing or distributing their products, the owner would be able to use their greatly-inflated negotiation power to name their price for granting a license. This would frustrate the purpose of setting standards, which is to allow the industry to smoothly coordinate efforts, even if it involves the use of proprietary technology.

Recognizing the difference between a regular negotiation and negotiating in the context of SEPs, in its Bylaws, the IEEE specifically prohibits a patent owner from seeking a protective order asking for injunctive relief for use of its proprietary technology once the owner has agreed to license its technology on FRAND terms.

2. **Background for Instructor**

*The Ruling from the Actual Case*

Motorola lost on all grounds for an injunction. The court first granted an anti-suit injunction preventing Motorola from enforcing any injunctive relief it could get from the open case in the German court, and then dismissed all of Motorola’s claims for injunctive relief in the U.S. courts. The court reasoned that since Motorola was willing (and actually required) to accept a license under FRAND terms for the use of its SEPs, Motorola could not prove that it would suffer irreparable harm by any infringement and that monetary damages would be inadequate to address the harm, such that injunctive relief was necessary. Motorola could adequately address its harm by charging Microsoft a FRAND license fee.

*What have U.S. administrative bodies and the courts stated about whether injunctions are proper in the context of an SEP?*

Under the Obama administration, as one commentator stated in 2013, “the current trend in both the Federal Courts and the ITC [wa]s to prevent injunctive relief unless the potential licensee refuse[d] to take a license on FRAND terms.” For example, afraid of incentivizing hold-up, in 2012 the FTC commented, “the threat of an exclusion order could allow a patentee to obtain unreasonable licensing terms despite its RAND commitment.” Similarly, in 2013, the USDOJ and the USPTO wrote: “A patent owner’s voluntary F/RAND commitments may also affect the appropriate choice of remedy for infringement of a valid and enforceable standards-essential patent. In some circumstances, the remedy of an injunction or exclusion order may be inconsistent with the public interest.” Finally, in a widely publicized case involving Samsung and Apple even though the ITC sided with Samsung and enjoined Apple from importing its allegedly infringing products into the United States, the United States Trade Representative vetoed the ITC’s exclusion order. In that case, “The USTR relied on the DOJ and USPTO policy statement and required that any future ITC cases involving FRAND obligations include an examination of the public interest factors from the [DOJ/USPTO] policy statement along with explicit findings on those issues.”

---

32 Policy Statement on Remedies for Standard Essential Patents Subject to Voluntary F/RAND Commitments, Jan. 8, 2013, p. 6, as quoted in *Id.*
However, to the extent that they have discussed the issue, U.S. courts have been somewhat more forgiving. The general understanding that injunctive relief is not appropriate in the FRAND context is not a “bright-line” rule. For example, Judge Posner considered the question in Apple v. Motorola. Although he ultimately decided that an injunction was not appropriate, he did posit that an injunction might have been justified if “Apple refuse[d] to pay a royalty that meets the FRAND requirement.”

This proposition was expanded when the case was appealed to the Federal Circuit, which stated “to the extent that the district court applied a per se rule that injunctions are unavailable for SEPs, it erred.” Although the Federal Circuit went on to affirm the lower court’s denial of the injunction, and to state in dicta that in fact it may be difficult for an licensor to prove irreparable harm given the licensor would receive fees to compensate for infringement, the court nonetheless returned to the applicability of the eBay factors to determine the appropriateness of injunctive relief in a patent setting: “The framework laid out by the Supreme Court in eBay, as interpreted by subsequent decisions of this court, provides ample strength and flexibility for addressing the unique aspects of FRAND committed patents and industry standards in general.” The Federal Circuit left the door open for licensors to apply for injunctive relief, particularly calling out the situation where an infringer refuses to take a license or “unreasonably delays negotiations.”

3. Questions for Student Discussion

Should Plaintiffs with SEPs be held to a different standard in terms of their ability to seek injunctive relief for infringement than plaintiffs with patents that are not adopted into a standard?

Does the mere requirement that SEP patents be licensed on FRAND terms adequately counteract the increased market power that comes from being adopted into the standard?

Can SSOs rightfully deny a patent holder the right to seek injunctive relief? Can a patent holder contract away that right, especially through guidance documents of an SSO, as with the IEEE, which may or may not be enforceable contracts?

If a patent owner does not have the right to seek an injunction, does that create a situation ripe for “reverse hold-up,” where a would-be licensee can stonewall the negotiation and drive down the price of a license well below its value before agreeing on terms?

36 Id.
37 Apple v. Motorola, 869 F.Supp.2d at 913-923.
38 Id. at 914.
40 Id. at 71-72.
41 Id. at 72.
C. Expanding to a Broader Public Policy Discussion

Depending on how the instructor would like to use the final moments of the class, the following are some questions that can place the discussion in context and bring up broader policy issues:

1. Do SSOs serve a valid public purpose in the way that they compromise the individual’s IP rights for the good of the whole?

2. Don’t SSOs actually support the individual company’s IP rights, since SSOs acknowledge that use should be compensated (even if there can be no injunctive relief and even if the compensation must be on FRAND terms)?

3. Does the concept of FRAND have any meaning, if it is left to the interpretation of the parties?

4. Should SSOs consider changes to their operations or operating documents to make it explicit that when members join an SSO, they enter a contract, which contract can be enforced by other members? Should SSOs endeavor to clarify what obligations a member assumes under the SSO contract?

5. Should SSOs offer more guidance on what terms might be considered FRAND (as the IEEE documents do)? Should they include an enforcement mechanism for when members cannot come to agreement on FRAND terms? If the SSO gets more involved in defining or enforcing FRAND terms, at what point does the SSO engage in anticompetitive behavior or even violate antitrust laws?

6. Does the Microsoft case embolden would-be licensees and worry patent owners enough to damage the standard setting system? If so, what would reassure both parties that the system can work? What could be done to improve the standard setting process?

V. OTHER TOPICS PRESENTED BY MICROSOFT V. MOTOROLA

If the instructor and class are especially interested in Microsoft v. Motorola, the case brings up a variety of other interesting issues. They could be fodder for additional discussion, or they could form the basis for a second follow-up class.

A. Jurisdiction Issues
   a. Should the Ninth Circuit have been able to consolidate the contract and patent infringement cases if the Federal Circuit has sole jurisdiction over patent cases? Is this case really a contract case or a patent infringement case?
   b. Should the U.S. district court and the Ninth Circuit have rightly been able to stay the injunction imposed by a German court (particularly given mechanisms available to Microsoft to stay the injunction though the German system)?
B. Damages Issues

Microsoft was awarded its attorney’s fees as damages in a contract case for defending against the German and U.S. injunctions. How was that permitted, when under Washington State law, a litigant cannot get an award of attorney’s fees unless there is a contractual, statutory or equitable exception that applies? For example, in a typical patent infringement case, under statute, an award of attorney’s fees is permitted if the defendant can show “exceptional circumstances.” However, the circumstances in this case were not exceptional, and in this phase of the trial, this was not a patent infringement case. How can Microsoft circumvent this requirement?

The court was willing to apply an equitable exception that had not yet been recognized in Washington, namely that an award of attorney’s fees is appropriate when the opposing party violates a covenant not to sue. The court then reasoned that an agreement not to file for injunctive relief could be seen as a covenant not to sue. According to the court, if Microsoft was able to show that Motorola’s seeking an injunction violated the duty of good faith and fair dealing with the SSO, then Motorola had had a covenant not to sue Microsoft, and therefore Microsoft’s attorney’s fees were recoverable damages. The court also did not accept Motorola’s Noerr-Pennington doctrine argument, which doctrine protects parties that apply to the courts for redress against claims based on their having filed litigation. The court reasoned that Motorola had waived or limited its petition rights to apply for an injunction through its contract with the SSOs, and therefore since it didn’t have the right to petition, Noerr-Pennington no longer applied. For the Microsoft district court’s fuller analysis, see 963 F.Supp.2d 1176, 1192-1196 (W.D. Wash 2013), and the 9th Circuit’s analysis at 795 F.3d 1024, at 1047-1052 (9th Cir. 2015).

C. Right to Jury Trial

By running the first half of the case as a bench trial and the second half as a jury trial, the Microsoft court was presented with interesting seventh amendment issues. The court had to separate the appropriate questions of law and fact, and also consider how to use the voluminous Findings of Fact and Conclusions of Law in the jury trial in a fair way that preserved Motorola’s right to a jury trial. This issue is explored in more depth in Microsoft Corp. v. Motorola Inc., et al., 2013 WL 5373179 (W.D.Wash. Sept. 24, 2013).

43 Id., at 1195-1196.
VI. ADDITIONAL READINGS

In addition to this teaching guide and the accompanying case study, the instructor may find helpful the following additional reading materials.

• **Most Relevant Cases**
  
  - *Microsoft Corporation v. Motorola, Inc., et al.*, 854 F. Supp.2d 993 (W.D. Wash Feb. 27, 2012) (Ruling that contract with SSO was binding and Microsoft was third party beneficiary, but denying summary judgment because fact issues remained on whether license offer had been on FRAND terms).
  - *Microsoft Corporation v. Motorola, Inc., et al.*, 871 F. Supp2d 1089 (Grant of preliminary injunction to stay enforcement of German injunction), aff’d 696 F.3d 872 (9th Cir. 2012).
  - *Microsoft Corp. v. Motorola, Inc.*, 2013 WL 2111217 (W.D. Wash April 25, 2013) (Court issued Findings of Fact and Conclusions of Law, redacted, which set FRAND rates for Motorola’s SEPs.)
  - *Motorola v. Microsoft* 795 F.3d 1024 (9th Cir. 2015) (Appeal affirming the district court’s determination of FRAND rate, the decision to let the jury decide on breach, and the ruling on attorney’s fees).

• **Additional U.S. Cases**
  
  - *TCL Communication Technology Holdings Ltd. v. Telefonaktiebolaget LM Ericsson et al.*, case number 8:14-cv-00341, (C.D. Cal 2017) Court used top down approach to find that rates offered were not FRAND; found breach of non-discriminatory prong (using comparables) can occur even with only harm to the individual company and that companies with small market share should have same royalty rate as larger companies).
  - *Commonwealth Scientific and Industrial Research Organisation v. Cisco Systems Inc.*, 809 F.3d 1295 (Fed. Cir. 2015). Federal Circuit overturned district court because lower court had determined FRAND terms incorrectly because it took the fact that the patent was essential to the standard into account when computing value. Federal Circuit stated that in determining patent value, the analysis must focus on the “incremental value that the patented invention adds to the product,” not “any value flowing to the patent for the standard’s adoption.”
  - *Ericsson Inc. v. D-Link Systems, Inc.* 773 F.3d 1201 (Fed. Cir. 2014). Federal Circuit overruled district court that had not modified the Georgia-Pacific factors by taking out ones that were “misleading or irrelevant” in context of determining SEP royalties. Also said that court does not have to instruct jury on possible hold-up or royalty stacking when determining FRAND royalty, unless defendant shows empirical evidence of holdup or stacking.
• Apple Inc. v. Motorola Mobility Inc., 886 F.Supp.2d 1061 (W.D. Wis. 2012); appealed to Federal Circuit as Apple Inc., et. al. v. Motorola, Inc., No. 2012-1548, 2014 U.S. App. LEXIS 7757 (Fed. Cir. 2014). Court discounted the use of the Georgia-Pacific factors as a test for deciding a FRAND rate and instead focused on ex ante benchmarks, and denied use of injunction in a FRAND setting through a reasoned analysis based on the facts of the case (injunction decision affirmed on appeal, but other aspects of the ruling reversed).

• In Innovatio IP Ventures LLC Patent Litigation 2013 WL 5593609 (N.D. Ill. 2013). Court decided RAND rate for use of SEPs by class of manufacturers, adopting the Microsoft v. Motorola framework with small modifications to suit the facts of the case.

• Realtek Semiconductor Corp. v. LSI Corp., C-12-03451 RMW, at *2 (N.D. Cal. 2012) Court allowed discrimination-based claim for breach where "defendants have made licensing proposals to other component manufacturers that included a different royalty structure that did not have the effect of requiring a royalty that exceeds the selling price of the component."

• Overseas Cases

• Unwired Planet v. Huawei, 2017 EWHC 711 (Pat) UK judge used “top down” royalty calculation to determine a single FRAND rate; found no breach of contract or anti-competition law violation unless licensor offered rate significantly higher than the FRAND rate; not “non-discriminatory” under FRAND unless differing rates distort competition; found injunctive relief appropriate.

• Xian Xidian Jietong Wireless Communication Co., Ltd (IWNComm) v SONY mobile communication products (China) Co. Ltd., Beijing Intellectual Property Court, 22 March 2017 First injunction over an SEP in Chinese court involving a patent over WLAN technology owned by a Chinese company.

• Huawai v. Samsung, Shenzhen Intermediate Court, 11 January 2018 First Chinese injunction awarded over an international SEP.

• Samsung Inc. v. Apple Limited Patent Act, Sec. 100; Civil Code, Sec. 1 para. 3 IIC (2015) 46: 124 (Japan Grand Panel of IP High Court) Used “top down” approach to lower license terms to FRAND and denied Samsung’s injunctive relief.

• Selected Articles


• Contreras, Jorge, Much Ado About Hold-Up
http://www.law.nyu.edu/sites/default/files/upload_documents/Jorge%20Contreras.pdf [draft]


• Lim, Daryl, Standard Essential Patents, Trolls, and the Smartphone Wars: Triangulating the End Game, 119 Penn St. L. Rev. 1 (2014) http://repository.jmils.edu/facpubs/511


• Nilsson, Fredrick, Appropriate Base to Determine a Fair Return on Investment: A Legal and Economic Perspective on FRAND, December 2017 GRUR Int., 1017-1023.


• **Online Resources**

  Patently-O https://patentlyo.com
  IP Watchdog www.ipwatchdog.com/
  Essential Patent https://www.essentialpatentblog.com/
  Kluwer Patent Blog patentblog.kluweriplaw.com/
  iam www.iam-media.com/blog/
  Written Description https://writtendescription.blogspot.com/
  The Regulatory Review: www.TheRegReview.org