



The Viability of FRAND:

How the Seminal Microsoft Ruling Could Impact the Value of Standard Essential Patents and the Future of Telecom Standards



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1. Introduction

Despite the widespread use of fair, reasonable and non-discriminatory policies (F/RAND) policies by the majority of SSOs for several decades, there has been growing concern from certain actors on the judicial, political, and business arenas that a lack of market consensus on the meaning of F/RAND could facilitate a systemic level of opportunism by standard essential patent (SEP) holders in the market. This concern, while observable in specific cases, has not been empirically shown to have a systemic effect on the ICT market. One such case, involving a dispute between Microsoft and Motorola over F/RAND royalty rates for SEPs in the H.264 and 802.11 standards led to a landmark ruling in the US Federal Court of the Western District of Washington in 2013, which was affirmed by the US 9th Circuit Court of Appeals in 2015.

This paper addresses the viability of F/RAND policies to regulate the equilibrium between patent holdup and freeriding (or patent holdout) in the context of telecommunication standards. As market transactions are executed in the shadow of the norms of the court system, the relation between F/RAND and the judicial arena is the main focus. Using the landmark *Microsoft* ruling, this paper seeks to investigate (1) what were the state of the art valuation principles deployed by the court to determine FRAND royalty rates and (2) what were the key areas of contention regarding how the valuation principles are reduced to practice and deployed as valuation methods by the court, (3) how generalizable are the decisions by the court on other standardization contexts, and (4) what are the implications of these valuation methods on industry strategy and policy. These are particularly important issues as they define the value of standard essential patents, which is one of the key battleground issue in the struggle to define the agenda for a new patent era, where the role of patents as a tool to facilitate innovation and welfare is being challenged. The full paper is under review and will be available in an academic journal in the near future. Below is a short summary of the preliminary findings.

2. Analysis of *Microsoft* Decision

The 207-page decision by Judge Robart in the *Microsoft* case highlighted the following key factors in the valuation of SEPs in a F/RAND context:

1. **Five guiding principles for SEP valuation** of which four focused on static efficiency and one on dynamic efficiency.
2. **A F/RAND-modified version of the Georgia-Pacific factors** adapted primarily to accommodate the principle that a F/RAND royalty should be based on the economic value of the contribution of the patented invention apart from the value associated to its inclusion in the standard (i.e. the holdup value).
3. **A qualitative SEP valuation analysis**, including:

- An ex ante evaluation of the SEP portfolio in comparison to competing technologies at the time of standardization.
 - An ex post evaluation of the SEP portfolio in relation to its use value in the standard and the impact in the end products.
4. **A quantitative SEP valuation analysis using multiple royalty bases and methods**, including:
- Market comparable rates from both successful and unsuccessful patent pools related to the standards in the case with an implied end product royalty base.
 - Market comparable rate from the computer chip industry on a component level royalty base.
 - Feature Factor Method deployed in a prior valuation of the SEP portfolio by a consultancy firm with an end product royalty base.

3. Main Areas of Contention

Below are several areas of contention present in the *Microsoft* case that will likely define the viability of F/RAND to facilitate collaboration among diverse stakeholders in standardization settings.

1. Ex Ante Evaluations Applied Ex Post

The use of comparative analysis of competing technologies prior to the setting of the standard (i.e. ex ante analysis) was deployed by the court retrospectively as a means to eliminate the holdup value of the SEP portfolio despite the fact that the court itself acknowledged that it “lacked real world applicability” and cited its “impracticality with respects to implementation by courts.” An important question is whether the comparison is made ex ante enough given the technology development decisions are made at the time of R&D investment prior to competition in standards.

2. The Royalty Base and the Battle Over the Value Chain

The court in *Microsoft* deployed multiple methods using different royalty bases to reach its decision. This implies that the logic of the apportionment argument in the valuation method takes precedent over a fast rule on the position of the royalty base. This ultimately will impact the distribution of profits in the value chain and the viability of IP-based business models.

3. Market Comparables – Transforming Apples into Oranges

The *Microsoft* court evaluated four different types of comparables to support its F/RAND royalty determination – patent pool rates, previous licensing agreements employing the SEPs in suit, similar industry licensing agreements, and an expert valuation report. In addition, Motorola presented a number of prior license agreements including the specific SEPs in suit, but the court dismissed these. The varying contexts of these comparables leaves open a wide range of objections and interpretations by future courts. As innovation specialists typically don’t participate in patent pools, an important question is

how the use of patent pool rates by courts impact the strategic behavior of innovation specialists and the rate on innovation in technology standards.

4. Key Implications

The *Microsoft* case offers several potential implications for reflection by industry and policy makers that impact the viability F/RAND and telecom standards, of which several key areas are described below.

1. **A potential re-imbaling of the value of SEPs from ad hoc holdup to systemic freeriding (i.e. holdout).** The results of landmark cases have great potential to change the norms of how business is conducted. The fact that Motorola only received a small fraction of what they had originally demanded has already impacted the belief among many IP and licensing professionals that SEPs are now of much less value. Thus the normative impact of this landmark case could produce a downward pressure on all SEPs regardless of the context, which could swing the pendulum from a fear of holdup to a condition of systemic freeriding or holdout.
2. **Innovation specialists may need to reconsider the risk profile of their standardization strategies and business models.** The *Microsoft* ruling, in combination with a growing pressure on actors labeled as non-practicing entities (NPEs), will require innovation specialist firms to rethink their mode of involvement in standards and their position in the value chain to manage the risk of potentially increasing efforts to weaken the strength of SEP holders. This can impact innovation and overall economic efficiency by impacting the development of a division of innovative labor in the market.
3. **Firm strategy will continue to shift from winning the game to changing the rules of the game.** Implementation specialists, in particular, will be incentivized to delay negotiation of F/RAND licenses and instead focus on weakening the concept of F/RAND through judicial, legislative, policy, and regulatory means. In this regard the *Microsoft* case exemplifies the potential impact of affecting the norms of F/RAND on a systemic level.
4. **Reinforcement of the fear of holdup leading to new policy proposals by SSOs, regulatory bodies, and legislatures.** While the *Microsoft* case could certainly be characterized as an anecdotal case of patent holdup, there is still no evidence of systematic patent holdup in either the H.264 or 802.11 standard, having been in use for 10 and 16 years, respectively, under F/RAND-enabled IPR policies. This indicates that there is not sufficient theoretical or empirical evidence to warrant major policy changes as the systemic consequences of these changes could negatively impact economic efficiency, in particular, through an unfavorable tradeoff of static efficiency for dynamic efficiency that only redistributes instead of enhances economic surplus. Thus the *Microsoft* case is proof that isolated instances of patent

holdup can be adjudicated by the US court system without the need of systemic policy reform that can have unintended systemic consequences.

5. **Different standards will experience different dispute profiles.** One main insight from different levels of success of the patent pools in the *Microsoft* case is that standards should not be treated as homogeneous (i.e. each standard has its own market context and norms). If this is true one might expect very little if any litigation in respect to the H.264 standard in the future. The 802.11 standard on the other hand will likely experience greater litigation as WiFi is a large industry of its own with a growing number of innovation specialists and other non-practicing entities in the form of current and potential SEP holders.

6. **Motorola lost but Google may have won.** While the initial match-up between Motorola and Microsoft represented two competing philosophies on the value of SEPs, the purchase of Motorola by Google changes the dynamic. It could be argued that neither Google nor Microsoft benefit from strong SEPs and high F/RAND royalties based on their current, predominate business models. This exemplifies the complexity of the market environment where different actors in the value chain use patents for completely different purposes, meaning that the same patents can vary greatly in perceived value based on the business strategy of their owners. As new entrants into the telecommunication sector develop their R&D capacity and SEP portfolios, this will lead to new rhetorical positions on the value of SEPs, thus requiring courts and policy makers to view SEPs with a systemic, long-term view based on longitudinal evidence, not short-term business interests.