Chapter 8
Competing Value Logics in the Apportionment of SEP Damages:
A Comparison of FRAND Royalty Methodologies in U.S. Courts 2013–15

Bowman Heiden
Chalmers University of Technology, Sweden

ABSTRACT

This chapter comparatively examines the valuation methodologies put forward and accepted in four initial FRAND cases adjudicated in the US district court system in 2013-15 and finds a qualitative link to the business models (i.e., value logics) employed by the actors and the type of standards involved. Additionally, valuation models based on prior license agreements seem to currently produce higher valuations of SEPs, everything else equal. While the CAFC has clearly stated that apportionment is the governing rule in SEP cases, the variety of valuation methods put forward in similar contexts indicates the calculation of the SEPs still lacks consensus on both legal and economic grounds. However, a number of the most recent SEP rulings in district courts show clear accordance with clarifications from the CAFC in Ericsson and CSIRO. Additionally, the studied cases confirm the lack of empirical evidence of systemic patent holdup and royalty stacking and indicate that the contractual/transactional nature of SEP disputes can well be addressed on a case-by-case basis by the courts.

INTRODUCTION

The convergence of computing, Internet, and telecommunications has created intense competition over intellectual property in recent years. This is due to the fact that multi-technology products, such as smartphones and tablets, include thousands of patents across a broad range of technical functions that are owned by many different actors from disparate sectors, all of which compete to receive a share of the expanding telecommunications market.[1] Additionally, all devices are increasingly becoming

DOI: 10.4018/978-1-5225-5320-5.ch008

telecommunication-enabled through wireless functionality (i.e. smart devices) in what has been labeled as the Internet of Things (IoT), which in turn opens up new opportunities for telecommunication actors in non-traditional markets[2]. Thus technology convergence has created new innovations and markets but also increased competition by actors with different intellectual property and business norms.

One major area of contention regards intellectual property and technology standards[3] in the ICT sector, in particular, the pricing of licenses for patents essential to the implementation of a technology standard (i.e. standard essential patents or SEPs).[4] As each patent essential to the standard could theoretically be used to block or delay the implementation, most standard setting organizations (SSOs) have developed IPR policies to govern the open use of patents essential to the standard on fair, reasonable and non-discriminatory (FRAND) terms.[5] These policies are meant to facilitate a balance between the need for innovation and adoption and diffusion of the standard. In effect, FRAND policies work to incentivize upstream actors to invest in the development of standards and reduce the uncertainty of patent access among downstream implementers who will make irreversible, standard-specific investments before having obtained licenses from all the actors holding standard essential patents (SEPs). Thus FRAND agreements can be seen as an incomplete contract designed to ensure both compensation and access to patented technology but allowing the terms to be resolved through bilateral market negotiations outside of the SSOs, which alleviate antitrust concerns.

In 2013-15, the US federal court system issued several rulings determining the royalty rate of standard essential patents (SEPs) under FRAND commitment to standard setting organizations (SSOs). While not generating as much popular press as the smartphone wars between Apple and Samsung, these cases represent the culmination of a growing battle over the distribution of profits in the telecommunication value chain between technology owners and technology implementers fought through the context of standard essential patents and the FRAND agreements under which they are licensed.[6] From a downstream manufacturing perspective, SEPs are a cost to be minimized, while for an upstream technology provider, SEPs represent the output of its R&D investments from which it looks to maximize its return. This new mode of vertical competition in the value chain has opened up for new business models and new roles for intellectual property that challenge the traditional industrial norms. This has, in turn, generated a growing sentiment that the patent system is broken and no longer supports innovation (e.g. Boldrin and Levine, 2012; Jaffe & Lerner, 2011; Bessen & Meurer, 2008). Thus, these court cases not only have a strong influence on the value of patents in the telecom industry but on the efficacy of the patent system as a whole to support the emergence of new knowledge-based business models and a new division of innovative labor in the knowledge economy.

Theoretical concerns emerged around the turn of the century over the shear increase in the number of patents (i.e. patent thickets) and the increase in the number of different patent holders (i.e. royalty stacking), which created an influential strand of literature around what has been termed, patent holdup (e.g. Lemley and Shapiro, 2007; Farrell et al., 2007; Shapiro, 2001).[7] Proponents of patent holdup claim that patent owners are able to command royalties greater than the value of the contribution of their patents by capturing the value of investments of specific-purpose assets by downstream actors. More specifically, in standardization contexts, patent holdup is interpreted as claiming the economic value of a standard as opposed to the contribution of the patented invention apart from the value associated with its inclusion in the standard. In other words, it is proposed that SEP holders are able to use the market power created by the lock-in effect of the standard to charge royalties greater than what they would have been able to charge in market competition before the standard was set (i.e. ex ante).[8]