IAM

Race to the bottom with top-down approach in FRAND rate setting for SEPs

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The US and Europe are heading in different directions on how SEP royalties are determined in FRAND licensing disputes. US authorities are increasingly hands off while proposed EU legislation constrains SEP enforcement and prescribes a valuation methodology which a Chinese court has recently used to drastically and defectively undercut established rates.

How different regions approach this question has global ramifications. By October last year, **EU state representatives asked the European Commission** to explain how measures the EU believes China "should refrain from adopting… that restrict, or seek to restrict, the exercise by patent owners of their exclusive rights in the territories of other [WTO] Members" would violate WTO Article 28.1 TRIPS, while the limitation of enforcement under the EU's proposed regulation is not a violation of that article?

The European Commission's proposals to set aggregate royalties and apportion them using the "top-down approach", **as I alerted here in April 2023,** is in accord with the Chongqing Intermediate People's Court's recent judgment in *Oppo v Nokia*. Chinese courts have form in setting **unreasonably and implausibly low SEP royalty rates, as illustrated in *Huawei v Interdigital***.

Standard-essential technologies are extensively employed in ICT services and products such as smartphones. These enable interoperability across networks and devices and among different suppliers. They also provide universal and cost-efficient access to the most innovative and valuable new capabilities. Yet the top-down approach under-compensates SEP licensors and threatens to drive rates down further as future rates are apportioned from ever-diminishing aggregates.

This suits China, which remains predominantly an SEP implementer. Most mobile phones are made there and effectively none are manufactured in the US or Europe. **This is a major threat to European innovators including Ericsson and Nokia** that have invested around one billion dollars apiece annually on R&D over many years. Similarly, America's Interdigital and Qualcomm invest large proportions of their revenues in standard-essential technology development. SEP owners are entitled to adequate compensation in FRAND licensing.

In the US, policy makers have eschewed rate-setting regulation and stipulating rote valuation methods by withdrawing guidance from government agencies including the USPTO, NIST and DoJ, while proposed law-making has also been neutered in this aspect. **A June 2022 proposed Standard Essential Royalties Act** is going nowhere with rate-setting. Alternative suggestions now are light touch and require balance in disclosure obligations with a registry of patents declared potentially standard essential by their owners and of standard-compliant devices by their producers.

In contrast, the EU's proposed legislation saddles SEP owners with additional costs and delays in receiving licensing payments. Burdens from essentiality checking of registered patents, non-binding aggregate royalty setting and rate apportionments are asymmetrically on licensors.

Royalties can be determined in various ways in negotiations, and by the courts and others in disputes. While courts usually rely on established comparable licences, some parties propose a top-down approach for royalty rate determinations. This typically requires an aggregate royalty to be apportioned by patent counting. Courts have usually either rejected this method outright or only used an *implied* aggregate as a cross-check. This is a crucially different use of the approach because it does not require the highly subjective and contentious *setting* of aggregate royalties. The *TCL v Ericsson* decision that used the approach alongside comparable licences was entirely and unanimously vacated on appeal.

Many academics and practitioners also shun the approach because **aggregate royalties are speculative and patent values are not proportionate**. Nevertheless, the simplicity of the top-down approach is self-interestedly welcomed by implementers seeking to minimise their royalty payments and is being embraced in jurisdictions with industrial policy objectives to reduce royalty-rates.

The publicly-available *Oppo v Nokia* judgment by the Chongqing court is heavily redacted, so it is only possible to partially assess its determinations.

In the ruling, the court accepts the plaintiffs' calculation of the three-year 5G standard industry aggregate royalty burden (ARB) to be in the incredibly precise range of 4.341%-5.273%. It adopts 2G-4G global aggregate royalty burden figures of 5% for 2G, 5% for 3G, and 6%-8% for 4G. The court also determines that aggregate royalty for multimode 5G handsets in this case is a weighted average of these rates with value contribution ratios for 5G, 4G, 3G, and 2G technologies of 50:40:5:5, respectively.

Details including numerical assumptions using hedonic regression to derive that inadequately low 5G aggregate have not been disclosed. The court insists corresponding figures for 4G, 3G and 2G have been affirmed in China and elsewhere. However, for example, it inaccurately represents that, according to news reports in 2009, Ericsson advocated that the highest ARB for LTE [4G] standard mobile phones was 6%-8%. Ericsson was referring to the amount it hoped licensees would end up actually paying. It did not use the term ARB which has a different meaning and was not coined until years later in *Unwired Planet v Huawei*.

The ARB is intended to be the starting point "T" in a top-down apportionment, for allocation in proportion to SEP value share "S". The Chongqing judgment also enthuses about patent counting with eight references to "Who [is] leads[ing] the 5G patent race" in essentiality declarations. The FRAND rate "R" is the product of the two: R = T x S. Yet, in practice, licensees do not pay anywhere near such large aggregate royalties as ARBs because many SEPs are never licensed and rates paid are significantly discounted, for example, in release payments with settlements or court judgments following years of patent holdout.

This is why aggregate royalties implied by dividing an SEP owner's royalty rate in a comparable licence by its presumed share of SEP value tend to be much higher than what's actually paid. According to *Unwired Planet*: "On Huawei's figures the implied total aggregate [4G] royalty burden T would be 13.3% while for Unwired Planet it would be 10.4%." The *Unwired Planet* ruling derived these higher percentages using same algebraic formula, but by using it the other way around to provide a cross check against other valuation methods. This actually makes it a *bottom-up* derivation: T = R ÷ S.

The Chongqing judgment gratuitously states that Huawei resisted this characterisation and **Huawei insists that its top-down approach starts from a** value for T of 8%. Huawei is neither a party to *Oppo v Nokia* nor an impartial commentator.

Unwired Planet is probably the most often cited decision on use of the top-down approach, but the judge was unwilling to set a figure for T because he considered statements about such figures as "self-serving" and about "other people's money".

My forthcoming article in the Journal of Law Economics and Policy explains how various widely differing aggregate royalty figures vary in derivation and meaning. It also considers characteristics and limitations in royalty rate apportionment based on the counting of patents that are declared essential and are checked for that exhaustively or with random sampling. While I disdain this approach, I indicate how the best can be made of this bad job.

Instead, and in accordance with the European Commission's stated aim of increasing transparency and predictability, it would be better to increase disclosure on existing licensing than make up figures. Existing royalty rates are largely market-based with reference to established licences. Discovery is better than fabrication. For new standards and applications, it is better parties establish rates through negotiation.

In absence of any indication of market failure and with abundant evidence of a flourishing and competitive ecosystem, there's no justification to regulate royalties. Administrative rate setting can be transparent, but that does not make those rates FRAND.

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