Patent licensing and FRAND: setting the rate and terms

September 2017

In *Unwired Planet* v *Huawei* Mr Justice Birss tackles a "blizzard of figures" head on. Decisions from April and June this year clarify and supplement recent European case law on the meaning of FRAND, and provide guidance on (i) concluding a FRAND (fair reasonable and non-discriminatory) licence and calculating FRAND royalties and (ii) calculating rates that is instructive for assessment of damages more generally.

Background

Birss J's highly-anticipated judgments arise from the non-technical trial in the long-running litigation between Unwired Planet and Huawei concerning infringement of six Unwired Planet patents. The judgments relate to Standard Essential Patents ("**SEPs**"), i.e. patents essential to a technical standard administered by the European Telecommunications Standards Insitutute ("**ETSI**") which requires patent owners to license their patents on FRAND terms.

The non-technical trial addressed issues which have never before been considered by an English court. The court has, for the first time, made a FRAND determination and set a FRAND royalty rate. In addition, it has provided guidance on how parties should approach a FRAND negotiation as well as addressing the remedies available for a patent owner and associated competition issues.

Although the judgments concern the FRAND undertaking given to ETSI, their principles apply more broadly to the FRAND undertakings given to other standards setting organisations.

A high-level review of some of the judgments' key findings and their implications can be found in our briefing here.

This briefing considers the detailed methods for arriving at a FRAND royalty rate set out by the court. It also reviews what other types of clauses are likely to be regarded as FRAND and the remedies available to patent owners if negotiations fail. (*Unwired Planet v Huawei* [2017] EWHC 711 (Pat) and [2017] EWHC 1304 (Pat)). (*All references in this briefing (including paragraph numbers) are to the first judgment unless otherwise stated*).

FRAND rate discussion

Birss J sets out guidance for calculating royalty rates and highlights that rates should be adjusted to reflect, among other things:

- the relative strength of the portfolio of essential patents as against the industry as a whole;
- the value the relevant patents add to the given standard and the current version of it; and
- variations in royalties in different countries / regions, the number of patents the licensor owns there and whether the licensee has a significant manufacturing base in a location where the licensor's patents are weak.

Setting a FRAND royalty

The court confirmed that it does not have an open ended jurisdiction to settle terms but can decide if particular terms proposed by parties are FRAND. Birss J concluded that he could decide the FRAND rate but "*not out of thin air*".

Relevant information to be considered in arriving at a fair and reasonable rate might include:

- evidence of how negotiations work in the industry;
- comparable licences; and
- decisions of other courts (though arbitral awards provide fewer insights).

The judgment also deals with the "non-discrimination" limb of FRAND: a non-discriminatory rate is one which is determined primarily by reference to the value of the patents being licensed and does not depend on the identity, size or negotiating strength of the prospective licensee (paragraphs 175 and 177).

Determining a FRAND royalty rate

"…arriving at a FRAND royalty rate is not different conceptually from assessing what a reasonable royalty would be in a patent damages enquiry albeit the particular factors applicable in setting a FRAND royalty for a licence to be FRAND and their application may differ from assessing damages". (paragraph 169)

Establishing a royalty benchmark rate

The assessment of a FRAND royalty begins with determining the value of the patent portfolio. Birss J begins by deriving a "benchmark" rate and from there makes adjustments to reflect the true value of the licensed portfolio. The benchmark is a measure of the intrinsic value of the portfolio, irrespective of the identity of the licensee. A price that significantly exceeds the economic value of the portfolio would be *prima facie* excessive and unfair. The benchmark rate should be applicable to all licensees seeking the same kind of licence. In this case the court set a global benchmark and adjusted it for particular regions – for example, if the licensor has fewer SEPs in a particular region or rates are generally lower there, it is fair and reasonable to scale the rate by an additional factor.

Significantly, the judge based his analysis on patent counting, determining that parties to a negotiation generally use such methods as it quickly becomes disproportionate to evaluate the importance of individual patents. He concludes that it is only feasible to categorise SEPs in broad categories, unless they are keystone inventions underpinning the entire technical approach of the standard.

Relevance to damages cases

The case is largely concerned with assessing the particular rate that is FRAND in the circumstances. However, the judge takes care to set out the method of calculation and general principles that can be applied in other cases. This is of relevance beyond the context of SEP licensing. In patent damages enquiries, damages will generally be set by relevance to what would be agreed by a willing licensor and licensee. In *Unwired Planet* the FRAND backdrop affects the ultimate end point but the approach to "unpacking" comparable licences (see "*Unpacking comparable licenses*" box below) is instructive for all patent cases.

Two methods to calculate FRAND royalties

The court found that there are two methods that may be used to calculate the FRAND royalty rate:

(i) Top down

The aggregate royalty rate – i.e. the total due for all SEPs relevant to a particular standard - is shared in proportion to the value of each licensor's portfolio. The value is determined based on patent counting as discussed below. In effect, the litigating licensor's share of the aggregate royalty will represent the strength (in numeric terms) of its SEP portfolio relative to the total SEP portfolio. Where a device implements several standards it may be relevant to apply some weighting method to arrive at the value of the various standards (see "*Multimode weighting factors*" box).

In this case the top down approach was rejected as the primary means of arriving at a FRAND royalty rate, since the public statements made by industry players were found to have little value in this respect, i.e. the court, amongst others, found them to be 'obviously self-serving' and therefore unfit for determining what the aggregate royalty burden should be.

(ii) Comparable licences

The rate is determined by assessing comparable licences and comparing their factual background with the facts of the case. The use of comparable licences was held to be the preferable method since they reflect terms actually agreed in the industry. The top down method was however used as a cross-check.

Assessing the FRAND rate entails:

1. Identifying comparable licence agreements entered into by the owner of the disputed SEPs or third parties. Licence agreements entered into ex-post standardisation are not disqualified for comparison purposes.

2. Identifying relevant SEPs held by the licensors whose licence agreements are being compared.

3. Assessing the value (R) of the disputed SEP portfolio relative to the portfolio licensed in the comparable licence agreements identified on the basis of patent counting, i.e. R is equal to the number of relevant SEPs held by the licensor divided by the number of relevant SEPs held by another licensor. In the case of devices implementing several standards it may be relevant to apply some weighting method to arrive at a value for R reflecting the value of the various standards (see "*Multimode weighting factors*" box).

   In the judgment the calculation of R is redacted (paragraph 379), but an overview of all resulting R values can be found in paragraph 478.

4. Assessing the benchmark rate (E) of the SEP portfolios licensed in the comparable licence agreements identified by 'unpacking' the licences in question (see "*Unpacking comparable licences*" box).

   It will often be difficult to identify licence agreements which are fit for comparison purposes – in this case many were rejected and only the licence agreements concerning the SEPs in dispute (because Ericsson had assigned them to Unwired Planet) were relied on.

"Unpacking" comparable licences

Many licence agreements contain diverging terms which makes comparisons difficult, e.g. cross-licensing, lump sum payments, licensing of other patents in addition to the disputed SEPs and assignment of rights. Such differences need to be considered in order to create a level playing field to try to avoid that the benchmark rate will not be misleading. In particular, the judge identifies lump sum payments and cross-licensing as the two major problems rendering comparisons difficult:

- Lump sum payments are dealt with by treating the lump sum as "the net present value of an income stream from running royalties analysed using a discount cash flow on some appropriate estimate of sales figures" (paragraph 188)

- Cross-licensing is dealt with by deriving two one-way rates from a single royalty rate on the basis of the relative value of two SEP portfolios being cross-licensed. However, the judge appreciated that cross-licences are generally entered into by companies which are both implementers and licensors (sometimes also called 'vertically integrated companies') and accordingly the royalty rates may understate the inherent value of the rights being licensed, i.e. be non-FRAND (paragraphs 180-190).

5. A FRAND rate is then calculated by using the formula ExR where E is the benchmark royalty rate charged in a comparable licence agreement and R is the relative value of the licensor's portfolio, (see point 3 above).

   However, the royalty rate in the comparable licence agreement cannot be presumed FRAND, since it may for instance reflect hold up, so caution is warranted.

   In the judgment Ericsson's Benchmark rate (E) in relation to its 4G SEP portfolio was for example found to be 0.80% on the basis of an assessment of six Ericsson licence agreements (paragraphs 464-465). Since the strength of Unwired Planet's portfolio of relevant SEPs relative to Ericsson's (R) was found to be 7.69% in respect of 4G handsets, the resulting benchmark (FRAND) rate calculated (ExR) was 0.062% (0.80x7.69).

6. Cross-checking the results using the top-down approach discussed above.

   In the judgment Birss J employed the top-down approach to cross-check the royalty rate derived from the comparable licence method (paragraphs 476-477). It was found, for example, that Unwired Planet's benchmark royalty rate for 4G multimode handsets was 0.062 % and that the company owned 0.70% of all relevant SEPs (factor S) which meant that the aggregate royalty burden (factor T) would be 8.8% (0.062/0.70). This was found to be reasonable and therefore to support the benchmark rate.

Patent counting - assessing essentiality

To calculate the proportion of relevant SEPs held by the licensor, the total number of relevant SEPs must be assessed.

Each party proposed its own patent counting technique.

The judge found that the methods used by the parties produced the wrong answer but used the figures resulting from Huawei's method as a starting point for simplicity and made adjustments on the basis of his qualitative evaluation of the evidence as a whole, including in particular the expert witness statements and the approach used by Unwired Planet.

The judge acknowledged that there is uncertainty in assessing the total number of SEPs in a technology field since it is not viable to strive for 100% certainty when thousands of patents are declared as SEPs.

Multimode weighting factors – modifying S and R in respect of multimode devices

- When dealing with devices which may incorporate several standards a weighting method may be relevant to calculate the FRAND rate
- In this case the factors S and R were modified in respect of 'multimode devices' (LTE/UMTS/GSM and UMTS/GSM capable devices, respectively) by using a recognised weighting method.

Ignore non-discrimination obligation for the benchmark rate approach

Birss J is clear that where the benchmark rate approach is used to derive a royalty, it is not necessary from a contractual perspective to read into the FRAND non-discrimination obligation the corresponding requirements of competition law. By definition the rate will not be discriminatory.

In cases where it is appropriate to apply the competition law standard, the question whether the licensing terms are discriminatory must not be divorced from an analysis of whether the terms are sufficiently dissimilar from that offered to other licensees to distort competition. Provided they are not, a licensor may be entitled to offer different customers different prices and terms. It will also be relevant to ask whether the differences are objectively justified (paragraphs 481-503). In effect, where a benchmark rate is derived from consideration of all comparable licences, the issue of discrimination should not arise. This is because the benchmark should reflect the terms of all of the comparable licences offered to similarly situated licensees.

Is a worldwide licence appropriate?

The judge concluded that if a portfolio is sufficiently large and of wide geographic scope, a willing licensor and willing licensee would agree a worldwide licence and such a licence can be FRAND even if different rates apply in different regions for different standards. This is because of the inherent efficiency of worldwide licensing as opposed to negotiating country by country. However, a worldwide licence will not *necessarily* be FRAND. In addition, if there is unlawful bundling the licence will not be FRAND.

In this particular case, the licensee's insistence on a UK-only licence was not FRAND because the court found that parties in the same circumstances would agree a worldwide licence. Interestingly the court found the royalty rate would be higher for a single territory because of the inefficiencies resulting from country-by-country licensing compared to global licensing.

Non-financial licence terms

The court also commented on the non-financial terms of the licence under offer (which were offered by one party and annexed to the judgment). Whilst the combination of terms will be specific to the factual circumstances of the case, the judgment offers an insight into the terms likely to be acceptable in licences of a similar type and complexity, i.e. worldwide licences of significant patent portfolios.

Examples of FRAND terms

The court noted that the FRAND licence should:

- not prevent the licensee from challenging validity and enforceability. (The court does not comment on whether a right to terminate on challenge would be enforceable but the annexed licence only has rights to terminate for material breach or insolvency.)
- have provisions dealing with sales in non-patent countries
- provide for what happens if some patents are declared invalid or non-essential: (i.e. have an appropriate mechanism to deal with countries which effectively become non-patent countries) – with annual adjustment of the royalty suggested.

The following were held to be FRAND, at least as part of the package represented by the licence:

- a 7 year term from expiry of a previous licence to three years after judgment when many of the relevant patents would still be in force: this was a term that the parties suggested but the court noted the difficulty of longer-term agreements where circumstances could change and patents be gained or expire over time;
- a release for back damages on the basis that royalties would be paid on the same rate as the forward looking royalties;
- royalties calculated as a share of net selling price and payable on sales; and
- conventional reporting, record keeping and audit arrangements.

Remedies: injunctions, damages and declarations

Patent owners will welcome confirmation that they have the leverage of the threat of an injunction to assist in negotiations. This is tempered by the need to ensure they have adopted the appropriate "FRAND approach" to negotiations before seeking an injunction, as failure to negotiate in a FRAND-like manner can lead to refusal to grant one.

If the licensee has made an unqualified commitment to take a licence on terms which, on the facts, are FRAND, an injunction cannot be granted. This should serve to constrain the conduct of both sides during licensing negotiations.

The court granted a declaration confirming that the terms of the licence annexed to the second judgment represented FRAND terms in the circumstances between these parties.

The court granted both parties permission to apply to return to the court in future (which is not usually available where a final injunction is granted) at the end of the term of the FRAND licence or if it otherwise ceased to have effect. However, the judge indicated that the court is likely to be unsympathetic to a patentee who has failed to start a process of FRAND negotiation well in advance of that expiry or to parties who drag their feet or are unreasonable in negotiation.

The judge made an interesting observation on the question of damages. It is established law that a licensor is entitled to a royalty by way of damages (and the court specifically declined to comment on whether some enhanced compensation could be available under the Enforcement Directive). However the court observed that in the case of a portfolio licence, damages would be based on a royalty notwithstanding that multiple patents were licensed, observing that if a licensee were subsequently sued under a different patent in the portfolio no damages would be available as they would already have been paid.

The FRAND injunction

Two conditions must be satisfied for a FRAND injunction to be granted:

1. A FRAND licence must be available for a licensee to accept, or a means available for setting one (e.g. a reference to an offer to commit to an arbitration process may be sufficient)

2. There must be at least one SEP of the licensor held to be valid and essential. In the context of large patent portfolios and SEPs of different intrinsic value, the court recognised that one is sufficient. Ultimately this may result in litigation over smaller numbers of patents.

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