

The smartphone wars arms race – FRAND¹ limitations on patent deployment

Summary and Implications

The patent wars raging in the global technology sector show no signs of a ceasefire. If anything, the tempo is increasing. The sector is currently seeing a wave of acquisitions of massive multi-billion dollar patent portfolios covering smartphones and computer tablets, driven by their purchasers' desire to equip themselves with ammunition in the increasingly vicious battle for global supremacy over mobile platforms.

One of the significant features of telecoms patents is the complex interlocking network of technical standards and the availability of FRAND patent licences (i.e. licence terms that are “fair, reasonable and non-discriminatory”). These could have a number of vital strategic implications for the combatants in the current patent wars, which could dramatically re-shape the outcomes and determine the ultimate global victors in the mobile platform wars.

- By committing patents to technical standards their patentees are obliged through their obligations to the standards setting organisation (SSO) to licence them on FRAND terms to willing licensees where those patents - or particular claims - are essential to the relevant standard. This enables competitors to win ready access to patentees' standards patents only at the cost of paying a reasonable royalty, leaving the patentees powerless to prevent their competitors from gaining such access.
- Patentees cannot get injunctions against competitors who are willing licensees of their standards patents. This has forced the battle onto different terrain, as the combatants fight over whether such patents are truly “essential”. Patentees will look for grounds to assert that FRAND-based licences are not applicable, and their competitors to counterattack by alleging that non-declared patents should properly be treated as being FRAND-based.

- The value of patents that are not encumbered by FRAND-based licences is therefore commensurately greater. The same applies to other non-patent IP rights that have the potential to dominate strategic bottlenecks such as the shape and design of smartphones and computer tablets.
- A major issue between the combatants is likely to be the extent to which a patentee of a FRAND-encumbered patent can use these patents to force its competitor to cross-licence unencumbered patents. The commercial imperative to seek to do so is clear, but this issue remains to be determined by the main Courts around the world.

FRAND standards

It is commonplace in many fields of technology – mobile phones included - for SSOs to set technical standards to ensure that different manufacturers' products are compatible. The central importance such standards play in the mobile platform wars is underlined by some of the technologies covered by standards and which will be familiar to every user of a mobile device – GSM, GPRS, EDGE, 3G, and 4G through to the JPEG standard for digital photography if the mobile device is camera-enabled.

When setting a standard the relevant SSO will require industry participants in the standards setting exercise to notify it of any patents which are “essential” for use in the standard, as well as issuing a general request to interested parties to do so. Broadly, this requirement of “essentiality” equates with patent infringement, in that the manufacture, sale, etcetera of products and/or processes complying with the relevant standard will inevitably infringe the essential patents covering the standard.

1. The terms FRAND and RAND are generally interchangeable; FRAND seems to be preferred in Europe and RAND in the US.

Some SSOs will be satisfied with industry participants in the standards setting exercise giving a general commitment to licence any essential patents on FRAND terms.

Given this context and to ensure that manufacturers are protected if they adopt the technology embodied in the standard, patents that have been notified as essential to the standard are generally required to be licensed on FRAND terms (i.e. on terms that are fair, reasonable and non-discriminatory) to all would-be users of that standard, whether competitors or not. Such FRAND licences have a number of features.

- “Reasonable” means that the royalty and other licence terms must be fair, and must not be excessive or extreme. Licences will be on a non-exclusive basis. Unusual terms – price or otherwise – must be based on a valid reason.
- A “reasonable royalty” must be - or approximate – the price that would hypothetically be reached in an arms-length negotiation. Evidence of royalties charged by other companies for comparable essential patents is perfectly valid in this exercise, as are royalties charged by the patentee in similar but competitive markets.
- Patentees cannot get injunctions against competitors who are willing licensees of their standards patents, nor can they seek to impose non-FRAND terms or royalty levels on willing FRAND licensees by threatening injunctions.
- Broadly, “non-discriminatory” means that the patentee cannot discriminate between who it licences, and cannot restrict competition in the way it licences. Thus behaviours such as discriminating against and between commercial rivals (including those downstream), or offering royalty rebates or incentives to licensees, will be discriminatory. But it should be recognised that the “ND” part of FRAND is a difficult area of law, with potentially different nuances of approach between the EU and the US.

The existence of royalty-free FRAND licences (“FRAND-zero”) should also be noted, often relating to software. These FRAND-zero licences are typically FRAND licences that prohibit collection of a royalty or other fee, which can result in a different set of strategic imperatives. These are not discussed in this paper.

SSOs typically enshrine FRAND obligations on a contractual basis. This has great potential for disputes. There are a multitude of ways in which a FRAND licence can be granted that is potentially compliant with the requirements of being reasonable and non-discriminatory, and a plethora of ways a patentee can seek to handicap or hold up a commercial rival. It is little wonder that FRAND disputes are increasingly finding their way in front of the Courts – especially in the main patent jurisdictions of the US, the UK and Germany.

Strategic implications for FRAND-encumbered patents

Once it has been declared essential, that patent will remain FRAND-encumbered even if subsequently sold. A purchaser of a substantial patent portfolio is likely to acquire FRAND-encumbered patents, and be considering whether – and to what extent – they can be deployed to further the purchaser’s commercial interests.

The FRAND-encumbered patent is fundamentally an undergunned weapon in the battle for global supremacy over mobile platforms, encumbered as it is by FRAND licensing commitments. FRAND patents are strategically excellent at generating a royalty stream, but cannot be used to shut a competitor down. Asserting a FRAND-encumbered patent in litigation is therefore often seen as weakness, and indeed doing so can potentially attract the regulators’ attention.

Conversely, a competitor can use a patentee’s FRAND-encumbered patent both defensively and offensively. It is a defence to allegations of infringement that a patent has been declared essential to a standard and must therefore be licensed on fair and reasonable terms. And the competitor can carry the battle to the patentee by requesting the Courts to declare that the competitor is owed a licence on fair and reasonable terms, and by asking the Courts to determine what those terms should be – in particular the level of royalty rate.

The question whether a particular patent is essential to a standard can be of significant commercial importance. The greater the number of patents a patentee has forming a standard the greater the licensing revenue payable. This can lead to over-

declarations, especially by patentees in certain areas of technology which their products do not use and by non-practising entities (and hence where both need no cross-licences).

Because there is often no provision for the SSO to check whether patents that have been declared as essential really do have this status, over-declaration can confer significant commercial advantages. In practice – and this is now well-established in the UK and the US – the Courts will accept jurisdiction to determine whether a patent is truly essential, and whether (and on what terms) a licence needs to be taken. The ability of a competitor to seek a declaration of non-essentiality is potentially a potent weapon, and one which a purchaser of a patent portfolio cannot readily predict.

This is not to overlook the usual patent litigation tactics of seeking to declare the patent in suit invalid, and denying infringement. But if the patent is held both valid and infringed the FRAND issue then potentially limits the results of the patentee's deployment of such patents merely to receipt of a reasonable royalty.

Any attempt to get an interim injunction - the nuclear weapon in any patent dispute - will normally fail, provided the competitor has made it plain that it is willing to take a FRAND-based licence. The issues surrounding grant of a permanent injunction after trial can be different if there is any sign of equivocation by the competitor that it will not pay FRAND royalties.

Strategic implications for FRAND-free patents

The mobile platform wars are all about capturing and holding the critical centre ground of the functionality and features which consumers regard as essential. Patentees look to shutting out competitors or forcing them to be less competitive by imposing a royalty on them. Strategically acute purchasers of patent portfolios are therefore less focussed on attacking their competitors on standards-based technologies (such as the so-called radio stack) because of the FRAND consequences. Instead, they are focussing on other strategic bottlenecks such as programming languages, and key user interface elements.

FRAND-free patents give considerably greater leverage, especially in the telecoms sector. Any purchaser of standards-free (and hence FRAND-free) patents is under no obligation whatsoever to grant a licence to any competitors, whether or not those competitors are willing to take a licence. Their strategic value lies in that they can be deployed normally, that is to say without the patentee having to modify its enforcement and litigation strategy to take account of possible FRAND-related defences.

Those patents should therefore be deployed first in getting interim injunctions against competitors. And, unless there are good reasons why particular FRAND-encumbered patents need to be asserted against a competitor (which will primarily be the outcome of infringement mapping considerations), litigation against competitors should ideally be limited to those patents.

The same applies to other non-patent IP rights that have the potential to dominate strategic bottlenecks such as the shape and design of smartphones and computer tablets. As such products become more and more consumer oriented, these kinds of design features become more significant than the underlying technology. The company that is able to dominate the market ends up dictating consumer expectations about the look and feel of products. A clever design registration programme coupled with continual innovation will generate monopolies in the look and feel of smartphones and computer tablets which can be asserted against competitors with FRAND impunity. The same logic applies equally to the development of key software.

Strategic implications of FRAND-encumbered and FRAND-free patents being cross asserted

The majority of battles between a patentee and a competitor will see both FRAND-free and FRAND-encumbered patents being asserted. As explained above, an owner of FRAND-encumbered patents is at a disadvantage in litigation as compared to an owner of FRAND-free patents - no injunction and only a reasonable royalty versus an injunction and whatever terms can be extracted.

The question then arises whether a patentee can deploy FRAND-encumbered patents against a competitor in order to compel the competitor to cross-licence the competitor's FRAND-free patents or other intellectual property rights, or at least to tolerate their ongoing infringement. This can also be a concern where there are allegations that patentees have not declared patents that should have been declared, and/or are deliberately concealing patents during the standard-setting process whilst simultaneously pushing for the technology to form part of the standard, and so those patents should be treated as being FRAND-based.

The commercial imperative to seek to do so is clear, and forms a central part of the current mobile platform wars. But this issue remains to be determined by the main Courts around the world. The scope and extent of the FRAND licence defence will play a central role in this. Because FRAND obligations are contractual this will also give rise to arguments based on breach of contract and the equitable doctrine of promissory estoppel – at least in common law countries. In the US there will also arguments based on breach of sections 1 and 2 of the Sherman Act (restrictions against restraint of trade and against monopolising trade) and Californian unfair competition laws, and in Europe arguments based on unfair competition.

Only one thing is certain, FRAND commitments – although often thought to be voluntary in character – have real teeth, and could dramatically re-shape the outcomes and determine the ultimate global victors in the mobile platform wars.

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