

# Patent errors

## Setting straight some common misconceptions about the economics of patents, licensing and technical standards

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Jorge Padilla of Compass Lexecon and Koren Wong-Ervin of Qualcomm Inc. discuss the competitive effects of patents and some behaviour of patent-holders.<sup>2</sup>

### Differential – and discriminatory? - licensing

Offering different licensing terms, including both price and non-price elements, to ‘similarly situated’ licensees is generally viewed as discriminatory. This is broader than the definition of discrimination usually adopted for tangible products and services - selling the same product to different customers at different prices which cannot be justified by differences in costs. The IP definition reflects the costly and risky nature of research and development efforts and the low marginal cost of licensing.

Differential licensing can be anticompetitive. However, it can also be procompetitive, for example through improved efficiency, growing markets, intensified competition, and enhanced consumer welfare. For example:

- Licensors can adjust their royalties downwards for licensees facing more price-sensitive customers.
- Differential pricing helps a firm with fixed costs to recover its outlays.

Nearly all concern over potentially harmful discriminatory licensing has centred on the practices of vertically-integrated firms that both hold patents and practise them in a downstream market. However, the possibility of market expansion and other efficiencies indicates the need for a cautious approach to assessing discrimination in licensing even in such cases.

### Grant backs and cross-licensing

Grant backs are arrangements under which a licensee extends to the licensor the right to use the licensee’s improvements to the licensed technology. Cross-licensing involves two or more parties giving one another the right to use each other’s intellectual property.

Both these practices, like other licensing restraints, are generally procompetitive because they may facilitate the integration of complementary technologies, promote the dissemination of a technology, reduce transaction costs, clear blocking positions, and avoid costly patent infringement litigation. They should nonetheless be analysed case by case under an effects-based approach as they may occasionally have anticompetitive effects.

Grant backs reward the licensor for possible further innovations based on the licensed technology. They can therefore address market failures related to sequential innovation, in which initial innovators make insufficient efforts because they take no account of subsequent innovations based on their technology. There is a risk that grant backs may adversely affect competition, if they limit rivalry in innovation; for example if they substantially reduce the licensee’s incentives to engage in research and development; facilitate leverage of market power of the licensor into other markets; or extend the term of the patents that are covered by the initial agreement.

Cross-licences can solve the complements problem, which arises when there are multiple gatekeepers, each of which must grant permission before a resource can be used. This could prevent the resource from being used and hence stifle innovation. With cross-licensing, each firm is free to compete, both in designing its products without fear of infringement and in pricing its products without the burden of making a per unit royalty payment due to its counterparty. However, cross licences, too, can have anticompetitive effects in a few circumstances: such as when they act as cover for price-fixing or market division, or when a vertically integrated firm uses cross-licenses to obtain an insurmountable competitive advantage over non-integrated rivals.

<sup>1</sup> All opinions expressed here are those of the authors, Jorge Padilla, Senior Managing Director and Head of Compass Lexecon EMEA and Koren W. Wong-Ervin, Director of Antitrust & IP Policy at Qualcomm Incorporated, Washington D.C., Senior Expert and Researcher at China’s University of International Business & Economics, Beijing, and Former Counsel for Intellectual Property and International Antitrust and Attorney Advisor to Commissioner Joshua Wright U.S. Federal Trade Commission, Washington D.C.

<sup>2</sup> This is a summary of an article originally published in Concurrences Review, N° 3-2019, <https://www.concurrences.com/90983>

## No-challenge clauses

A no-challenge clause prevents a patent licensee from challenging the validity of a patent it has taken a license for, but that constraint applies only after it has executed a license agreement.

No-challenge clauses can improve incentives to innovate. They reduce the incentive for ex-post opportunism by the licensee after the licensing agreement has been signed. In a negotiation over a license for a large IP portfolio, both parties understand that some of the many patents in the portfolio may be invalid but that it would be prohibitively costly to identify those potentially invalid patents. Instead, the parties determine a portfolio royalty that accounts for the possibility that some of the portfolio's patents may be invalid.

If, on the other hand, licensees can challenge the validity of individual patents, consumers could lose out and IP holders could lose out through delay and costly litigation. The IP holder's incentive to invest in innovation would be reduced, if the holder does not receive compensation for its innovative contribution as agreed. Also, a rule that allowed licensees to negotiate terms under the assumption of probabilistic patents and then allowed them to exercise the option to challenge validity would naturally undercompensate upstream innovators.

It is difficult to see how including a no-challenge clause in a license agreement could amount to the unlawful abuse of dominance. The purpose of competition law is to protect the competitive process and not individual competitors. No-challenge clauses do not provide the IP holder with any enhanced leverage.

## Patent thickets

Patent thickets are overlapping sets of patent rights required by those seeking to commercialize new technologies. In such a situation, there could be a concern that users would need permission from multiple rights holders in order to use the assets. The difficulties of coordination would lead to inefficient underuse. A related concern is that cumulative royalties could become so high as to cripple the product market. A final concern is that patent thickets could result in inadvertent infringement of patents issued after products are designed, and that patent owners can use thickets to block follow-on innovation.

These concerns do not appear to be borne out in the real world in the context of licensing of Standard Essential Patents (SEPs), for several reasons. *First*, industry practice is for SEP holders to license their patents on a worldwide portfolio basis, and many SEP holders do not assert. SEP holders may also have insufficient leverage to push supra-FRAND rates, if SEPs have limited or no applications outside of the standard. SEP holders will be cooperating with one another in the development of the standard. As a result, there is no reason to presume that SEP holders will set rates without regard to the full complement of known SEPs.

*Second*, most standard-developing organisations (SDOs) require patent holders to disclose any IPRs contributed to the standard. It is highly unlikely that product manufacturers will be unaware of the potential SEPs that their products read upon.

*Third*, FRAND commitments limit any power of the patent owners to block follow-on complementary innovation. The likelihood of obtaining injunctive relief on SEPs is low, particularly in the United States.

*Fourth*, patents are not self-enforcing. Implementers can and routinely do use patented technology without permission. It is easy to understand why this can be an attractive strategy for an implementer. The worst penalty an SEP infringer is likely to face after adjudication around the world is merely paying the FRAND royalty that it should have agreed to pay when first asked.

Four potential solutions to the so-called patent thicket problem have been proposed: cross-licensing, patent pools, standardization, and package licensing for complementary patents. Cross-licensing and patent pools could be effective approaches to solving thicket problems - but the efficiency gains from such measures are uncertain (because the size of any inefficiencies associated with patent thickets is uncertain). That said, it is important to allow private-ordering mechanisms to enable markets to identify and pre-empt potential patent thickets.