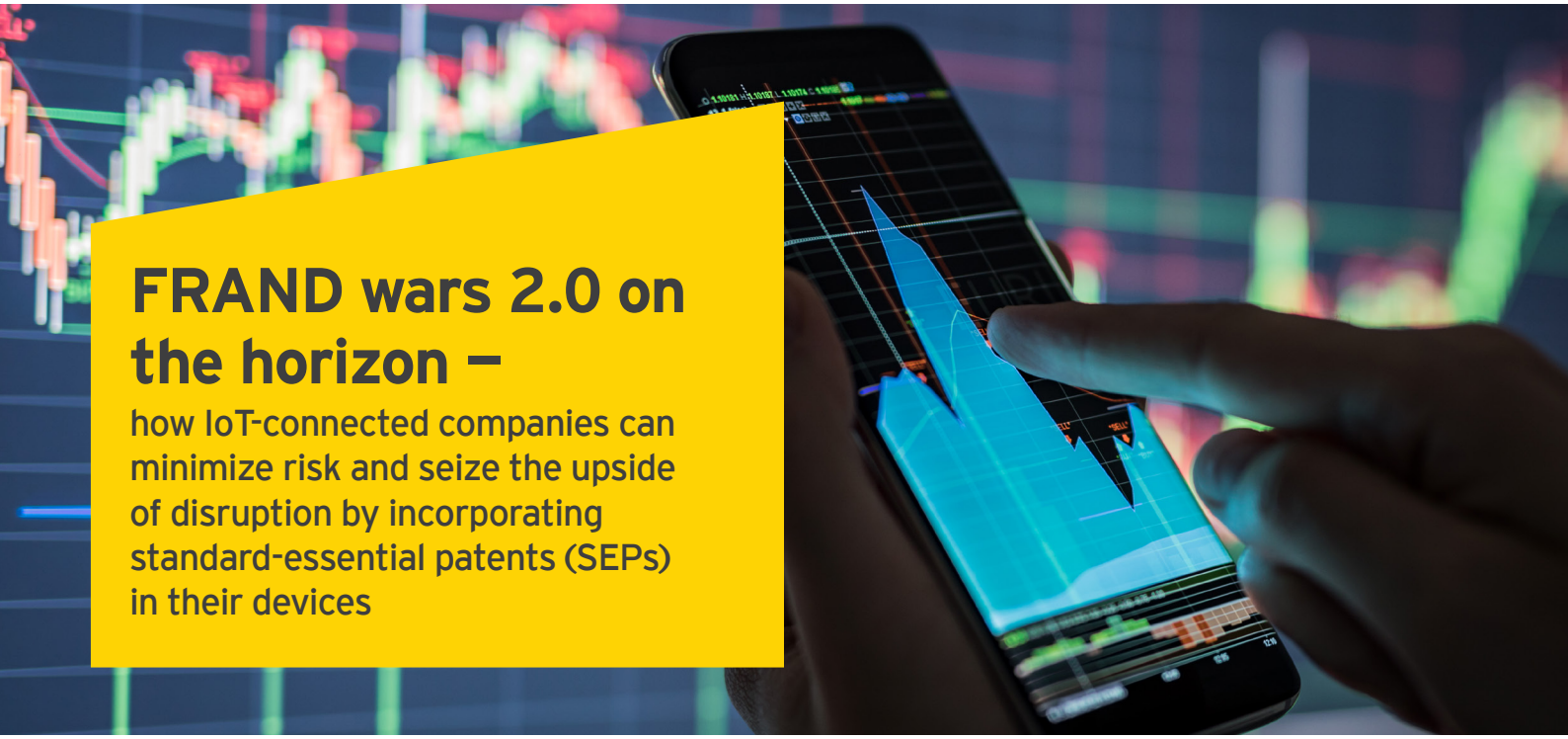
Building a better working world

July 2018

Law alert

EU competition law



FRAND wars 2.0 on the horizon –

how IoT-connected companies can minimize risk and seize the upside of disruption by incorporating standard-essential patents (SEPs) in their devices

The importance of SEPs

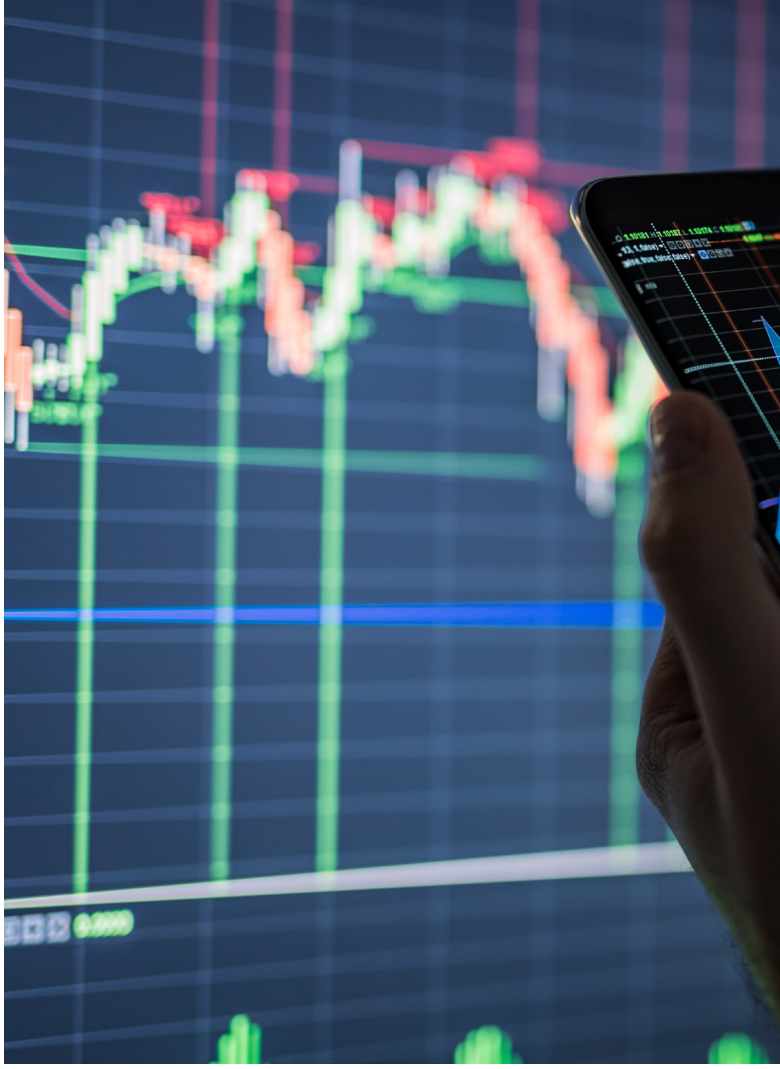
We are on the cusp of a transformational era where a range of internet of things (IoT) devices could connect vehicles, buildings, appliances, wearables and more. IoT devices will likely incorporate existing and future standards (e.g., GSM, 3G, 5G) to facilitate interoperability, and these standards are based on patented technologies. A patent that protects technology essential to a standard is called a SEP. Businesses in the IoT ecosystem should be cognizant that the determination of fair, reasonable and nondiscriminatory (FRAND) terms for the licensing of SEPs has led to several high-profile disputes in the telecommunications sector – FRAND wars 1.0. With the incorporation of SEPs into the IoT ecosystem, the confusion will likely spread outside the telecommunications sector, leading to FRAND wars 2.0.

A significant impediment to determining FRAND terms for the licensing of SEPs is the lack of adequate information about the validity, essentiality and enforceability of SEP standards. The SEPs are self-declared by developers as essential to the implementation of a standard and are not subject to review at the time of setting a standard. For example, more than 23,500 patents have been declared as essential to standards such as GSM and 3G. The lack of information could result in IoT standard implementers becoming exposed to excessive royalty demands based on a weak portfolio of patents or nonessential patents. In addition, businesses may find themselves embroiled in injunction proceedings in multiple jurisdictions, which threaten the launch or sale of IoT devices.

Connected technology – different perspectives of developers and implementers?

At present, there is also a lack of clarity about two fundamental issues related to the licensing of SEPs:

- The possibility of use-based licensing fees
- The availability of a license for all participants in a supply chain (and not just the end user, such as an original equipment manufacturer, or OEM, in the automotive industry)



As to the calculation of licensing fees for the use of SEPs, the current practice in the telecommunications sector is to seek a percentage of the price of the smartphone or tablet. If this is applied to the automotive sector, the total sales price of a car is likely irrelevant to the calculation of the value of the connectivity technology based on SEPs. On the other hand, developers of SEPs will likely be unwilling to settle for a licensing fee based only on a small percentage of the value of the chipset incorporating the SEPs. This is because the chipset prices are usually low when compared with the price of the end product. Developers may also want to move toward a use-based licensing system. This means a higher licensing fee will be charged when the SEPs are central to the main function of the IoT device, compared with SEPs that have a more ancillary function. Other criteria that may be relevant for calculating licensing fees may include mobility requirements (e.g., cars), frequency-of-use or larger bandwidth requirements (e.g., surveillance cameras). The rationale could be that higher mobility, use or bandwidth would require wider usage of the connectivity or interoperability standards. Implementers, on the other hand, may find that a use-based licensing fee is the wrong approach, as developers would be profiting from the downstream innovations of the implementers.

As for the second issue — the point in the supply chain where a license agreement can be concluded — telecommunications industry royalties are sought from end users, i.e., mobile phone manufacturers, and not the companies that make the component chipsets that incorporate the SEPs. If it is assumed that this practice is extended to the automotive industry, the licenses for the SEPs may not be available to participants within a particular point of the supply chain, such as a Tier 1 or Tier 2 supplier. The developer may find that a proper licensing fee can be decided only when all the components have been integrated at the OEM level. On this basis, the developer may refuse to hold negotiations with a supplier who is unable to fully understand the use of the SEPs by the end customer, as the appropriate licensing fee may be based on the economic value the patented technology adds to the IoT device.

An automobile will incorporate hundreds of patents, and a particular standard may be implemented through the use of multiple components from different suppliers. Implementers may be concerned that the unavailability of a license to participants in a supply chain would lead to greater administrative burden and disrupt the supply chain until multiple licensing negotiations are concluded.

Futureproofing

It is unrealistic to expect that all the differences between the developers and implementers on the issue of SEP licensing will be resolved, and it seems high-stakes litigation is almost inevitable. The complexity of the IoT system involved could lead to the creation of new licensing tools and royalty calculation methodologies. However, companies cannot wait for these processes to evolve.

[1] Source: Commission Staff Working Document, Impact Assessment, SWD(2018) 138 final

To ward off potential lawsuits, increase leverage during royalty-rate negotiations or coerce the opposite party into a settlement, the telecommunications industry typically has adopted a defensive strategy of patent portfolio acquisitions. Recently, there is an increase in the number of convergence deals in sectors, such as media, entertainment and technology. This is driven in part by demand at the customer level of aggregation of services. The traditional rationales of a deal have moved from operational synergies, revenue and income-growth targets to technology access and protection. In the IoT ecosystem, one of the synergies to be considered in a convergence deal is whether the technology standard being acquired will constitute a key part of the future connectivity solutions.

An acquisition may be considered costly or risky in a situation where it is unclear whether the technology will be widely accepted. In such a situation, collaborating with and combining components from other product and service developers, referred to as industrial mash-ups, may be a better alternative. This innovative way of building knowledge, developing go-to-market strategies informally and sharing risks may help companies in traditional industries, such as automotive, life sciences and consumer electronics. They can dip their toes to assess the situation before jumping head-first into the stormy waters of SEPs. A long list of such alliances has been announced recently. Another advantage of industrial mash-ups is that a company can have more than one collaboration, with multiple channels of input that otherwise would not have been possible.

The IoT ecosystem makes it harder than ever to see around corners and plan ahead. But in this age of digital disruption, standing still is not an option. With various moving pieces in the IoT chess board and connectivity standards, such as 5G, yet to be settled, defining appropriate standards will be a major challenge. The decision on which standards to adopt to ensure access to nontraditional technology and intellectual property should involve several alternatives to allocating capital. This includes mergers and acquisitions, joint ventures, alliances and industrial mash-ups, when complementary capabilities exist at another company. Decisions to buy, share or build new technologies and services must be made now to unlock value and to meet the challenges of an unclear licensing regime.

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