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STANDARD ESSENTIAL PATENTS, A MATTER OF TECHNOLOGICAL SOVEREIGNTY FOR EUROPE

Almost a year ago, the European Parliament voted in favour of the proposed regulation on Standard Essential Patents put forward by the European Commission. This vote marked the end of a first "battle" that began in April 2023, following the publication of the draft regulation by the Commission. Meanwhile, the Council of Ministers continues to review the file. This presents a timely moment to reflect on the history of these vital patents and to highlight their importance for Europe's technological sovereignty going forward.

Over the last decade, the rise of technology standards has been accompanied by an explosion in the declarations of Standard Essential Patents (SEPs). These standards are the result of extensive collaborative work funded by innovative companies within international standardisation organisations (ETSI, 3GPP, ITU, AFNOR, etc.). Often invisible to the general public, these standards are nevertheless everywhere in our daily lives. From the USB-C port to 4G/5G, Wi-Fi, or the audio/video codecs used by all streaming platforms, they enable everyone to communicate, inform, and entertain themselves smoothly and efficiently, regardless of products and brands, everywhere in Europe and around the world.

One area that has particularly driven this exponential growth in the number of SEPs is that of connectivity technologies.

From 12,000 SEP families in 2010 in this field, we have reached 75,000 declared families in 2023, according to ETSI (European Telecommunications Standards Institute), the European standardisation organisation for telecommunications that plays a global role in this registration.

At the same time, the connectivity needs of many global industries, particularly those of the automotive industry, smartphone manufacturers, or Internet of Things (IoT) manufacturers, have increased significantly. These standards, and the patents attached to them, have become crucial for their business. Due to the openness and accessibility of these standards, industries have been able to integrate new technologies into their products and services, enhancing efficiency and fostering innovation.

The issue of licensing these technologies has therefore become increasingly central between the holders of these patents and the companies that implement them.
The current system can undoubtedly be improved, but a three-decade hindsight has shown that it was functioning quite well. To date, no impact analysis has demonstrated market failure. So, what are the stakes?

More Transparency?

The draft regulation proposed by the Commission in April 2023 targeted three laudable objectives: more transparency, more balance, and more efficiency.

More transparency, particularly regarding the essential nature of these patents. The draft regulation also provides for the establishment of an evaluation, so the essentiality of the patents can be evaluated by an independent expert, within a Competence Centre created within the EUIPO (European Union Intellectual Property Office). Experts could thus verify the essentiality of patents declared as such by their holders, on an annual sampling basis.

Indeed, following its impact assessment, the European Commission suggested that there could an over-declaration of SEPs within standardisation bodies like ETSI. The subject may be more complex than it appears, and it must be acknowledged that practices can differ from one company to another.

When a company engages in standard development, it declares each of its contributions to the standard. These contributions may or may not be patented, and because they relate to a standard, they will subsequently be recognised as essential.

If this declaration is not made, it could lead to licensing issues concerning proprietary technology once the standard is adopted. Essential patents are then licensed when the standard is operationally exploited under very strict conditions. This practice offers recognition and additional valuation of the research and development efforts of the actors who cooperated in creating these standards. It helps maintain the commitment of actors in these ecosystems that build the standards of the future, open and accessible to all.

Interestingly, the European Commission continues to work on its European standardisation strategy. This aims to strengthen the sovereignty and leadership of the European Union in the development of global technological standards. However, the SEP regulation seems to be handled independently, without taking into account the impacts and consequences on this strategy.

As previously indicated, practices differ, and some market players have not waited for the Commission to implement a practice of validating the essentiality of patents. At Orange, for example, this approach has been part of our policy for years. Each potentially essential patent is submitted to an independent expert before being licensed.

More broadly, it is also the virtuous practice of "patent pools," these consortia created and managed by agents who license SEPs from multiple holders for a given technology. They strictly evaluate the essential nature of patents, organise licensing, collect royalties, and redistribute them among members. These "platforms" thus allow companies wishing to implement technologies (connectivity, audio/video codecs, IoT, etc.) to obtain a readable and simplified access point in the market ("one stop shop").

The European Commission, through its future Competence Centre, also plans to create a European database of SEPs, gathering a certain amount of information, both on the technology itself and on implementations in final products, different markets, etc.

While the theory seems appealing, this approach may be complex to operationalise. Firstly, the system already exists in part within each standardisation body. Furthermore, the text

provides that only the holders are required to feed this register, which, given the number of standards and patents, could prove to be a difficult and unreliable task to manage.

More Balance?

When a standard is deployed in commercial products, holders of essential patents can then ask companies that use these technologies to take a license. Two possibilities exist.

The first involves directly contacting the companies that implement the technology: the license must be concluded at a price known as "FRAND" for "Fair, Reasonable, and Non-Discriminatory." Because they relate to standards, SEPs are negotiated at regulated prices, unlike a classic property right. This negotiation process is long, complex, and uncertain. Indeed, nothing prevents a company from implementing a technology without paying for licenses since standards and patents are public documents accessible to all.

The patent holder must then provide proof that the implementer is using their technology. It is therefore quite rare for a company to spontaneously take a license. Worse, some implementers abuse this situation by delaying the licensing process as long as possible. This phenomenon is known as "hold-out." This major issue is unfortunately not addressed in the draft bill. However, new administrative and financial burdens would weigh on patent holders, such as the requirement to register in the database maintained by the future Competence Centre of the EUIPO.

More questionable, the regulation would establish a framework to determine the aggregated royalty for a standardised technology, even before the market exists. This proposal is not only contrary to competition law but would also heavily impact open innovation in Europe.

While licensing rates are already regulated and often "depreciated" on the grounds of mutualisation in patent pools, for example, licensing prices risk being driven even lower. This perception bias of high prices is fuelled by many actors, sometimes very powerful, who would like to use open standards without paying the fair price, or to substitute them with widely deployed proprietary systems.

The repercussions could be very negative for the entire European standardisation ecosystem.

The second option for taking a license involves joining a "patent pool," as mentioned earlier. They provide a comprehensive response regarding the verification of the essentiality of patents, transparency, or "FRAND" licensing. Indeed, they rely on independent evaluators from law firms in relevant geographies (USA, Europe, Japan, etc.) to assess the essentiality of the patents that holders wish to place in the pool.

They thus already constitute a real commercial solution to market issues, including that of IoT, as illustrated by the Commission. The latest agreement signed by the C-IoT patent pool administered by Sisvel with Nordic Semiconductors is a testament to this.

It will thus allow hundreds of clients of the Norwegian company, including Google and Alibaba, as well as a number of SMEs, to access all patents in the field of cellular IoT.

More Efficiency?

This regulatory project is very ambitious, particularly regarding the administrative complexity it requires for its implementation, akin to the Competence Centre within the EUIPO.

To date, because this instance does not possess expertise in patents, let alone in essential patents, it will have to create a new entity from scratch, from IT infrastructure to administrative processes, including recruiting at least 80 intellectual property experts. These resources are also very rare and already highly contested.

The Commission hopes to conduct 14,500 essentiality checks in the first year, averaging 65 patents per day. Current practice shows that it takes an experienced expert several days to several weeks to analyse a single patent. The question of funding the annual costs of external experts and conciliators also remains to be addressed.

In the current state of the proposal, the legislative simplification and reduction of administrative burdens highlighted by the Commission's "Better Regulation" program and included in the mission letters of the recently confirmed Commissioners and Executive Vice-Presidents, Virkkunen and Séjourné, is not easily discernible.

Towards the End of Open and Global Technological Standards?

The ambition to achieve more transparency, balance, and efficiency is commendable, but does this draft regulation meet it? Conversely, it could weaken European companies contributing to standards as well as the standardisation ecosystem, starting with organisations like ETSI. The latter, mentioned more than thirty times in the Commission's impact study, disappears from the tools envisioned by the proposal.

With this regulation, will European companies that invest in innovation be sufficiently encouraged in the global technological race? Would it not leave the door open to proprietary and closed ecosystems? Is this desirable at a time when the means for a sovereign digital Europe are strongly awaited?

ETSI could lose its influence in a few years, leading to a fragmentation of connectivity standards, with different models for each geographical area, such as Asia or America.

This perspective would be to the detriment of consumers, who would find themselves trapped in proprietary and closed ecosystems.

For these reasons, ETSI, the EPO, and a number of other important actors on the continent in terms of innovation and intellectual property have asked the Commission to reconsider its project and the impact analysis on which it relied. Even if the Parliament has already voted in favour of this very technical regulation, did it do so in a perfectly informed manner?

Nothing is set in stone.

The legislative process is now underway in the Council, and the text will thus be analysed and potentially amended. However, it seems that Member States wish to take the time to analyse the complex technical aspects. To better understand the stakes, they previously sent a list of over 200 questions to the Commission. The final step will then be the Trilogues, during which the Parliament and the Council will have to negotiate to reach a final text – a process that could extend over a prolonged period.