

# The functions of IPRs and their limitations in the context of SEPs (Standard Essential Patents)

## **Background:**

Standards shape our daily lives and the way we work. Computers, smartphones and tablets connect to the internet via standardised wireless technologies such as wifi. Without the widespread use of such standardised technologies, such a high level of interconnectivity would not be possible.

A technical standard is an established norm or requirement that applies to technical systems. Standards are generally set by standard-setting organizations (SSOs), such as the European Telecommunications Standards Institute (ETSI) which will be studied here.

Standard essential patents (SEP) protect technologies that are essential for complying with technical standards and for marketing products based on these standards. It is impossible to manufacture standard-compliant products such as smartphones or tablets without using technologies covered by one or more SEPs.

## **Research question & objective:**

Given their positive economic effects, standardisation agreements are generally compatible with anti-competitive regulations.

However, the evidence suggests that the licensing and enforcement of SEPs is not seamless and may lead to conflicts.

Technology users accuse SEP holders of charging excessive licensing fees based on weak patent portfolios, of using litigation threats, of extracting excessive royalty fees and of forcing the licensee to give up their invalidity or non-infringement claims against SEPs. SEP holders claim that technology users 'free ride' on their innovations and consciously infringe intellectual property rights (IPR) without engaging in good faith licensing negotiations.

The telecommunications industry has recently seen a significant increase in costly patent litigations which some commentators have called “smartphone patent wars”.

Disputes and delays in negotiations between technology users and holders may ultimately delay the widespread use of key standardised technologies. This can hamper the development of interconnected products in Europe, eventually affecting the competitiveness of the EU economy.

Given their essentiality to a standard, obviously SEPs are important for companies. The commission affirmed in its recent communication<sup>1</sup> :

---

<sup>1</sup> Brussels, 29.11.2017 COM(2017) 712 final, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL AND THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE, Setting out the EU approach to Standard Essential Patents.

- SEP show a higher degree of litigation than non-SEP ;
- Patent Assertion Entities (PAEs) are becoming increasingly involved in the SEP licensing market ;
- The percentage of granted injunctions should be lower for SEPs (since SEP holders may not seek injunctions against users willing to enter into a license on FRAND terms).

The aim of this study is to verify if these claims match reality, which was studied by examining patent case law comparing SEPs and non-SEPs.

**Methodology:**

In this study, two samples were compared :

- cases related to granted SEP families contained in ETSI database
- cases related to granted non-SEP families in telecommunications (corresponding to IPC classes : G08C, H01P, H01Q, H04B, H04H, H04J, H04K, H04M, H04N-001, H04N-007, H04N-011, H04Q) and Digital communication (corresponding to IPC class : H04L)