

New IEEE (US) rules for exercising standard-essential patent rights

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1. IEEE (USA) rules regarding standard-essential patents impose a reduction by a factor of 25 to 100 of royalties and prohibit their holders from seeking injunctive relief

In February 2015, the Institute of Electrical and Electronics Engineers (IEEE), a non-governmental organisation (NGO) which is accredited to develop standards in the field of Information and communication technologies (ICT) adopted new rules which seriously and significantly modify the applicability of existing patent law and jurisprudence, notably for those patents which are essential to technical standards ('Standard Essential Patents' or 'SEPs').

These new rules are deeply detrimental to the European industry where many innovators (Nokia, Alcatel, Ericsson and Siemens and thousands of Small and Medium Enterprises) position themselves in the professional (Business-to-Business or B2B) market and their investments in research and development (R&D) are, as a consequence, dependent either in whole or in part on the royalty returns from major industrial companies who integrate their inventions in final products which are then sold to the public.

With a growing number of Silicon Valley companies imposing their proprietary ecosystems that render their customers increasingly captive, the organised devaluation of standardised technologies by the IEEE reinforces these proprietary ecosystems, weakens supports for open and interoperable digital ecosystems and leaves the added value from the new services enabled by the investments of real technological innovators in the hands to those who control the relation with the customer (as is the case with NFC and retail banking for payments by mobile telephone).

More generally, this offensive, led by immensely wealthy groups, undermines the very foundations of the global patent system, whose founding objective and economic effect are to organise an upstream return channel of a part of the profits generated downstream. The very principle of patent law, which serves as a tool for regulating global exchanges of innovation, is today under attack.

The new IEEE rules will:

- **prohibit SEP patent holders from using injunctive measures** (allowing rights holders to legally prohibit the sale of counterfeit products). Rights holders will thus be deprived of judicial recourse in the event of the unauthorised exploitation of their inventions;
- impose very restrictive rules for calculating the royalties for licence agreements, **leading to a reduction by a factor of 25-100 of such royalties**. These rules are currently governed by the FRAND doctrine (Fair, Reasonable And Non-Discriminatory), which recommends using the value added by patented inventions in the end products as the basis for calculating royalties. The new IEEE doctrine imposes to base the royalty on the cost for the "smallest saleable unit"– a little like calculating the copyright fees for the author of a book based on the cost of paper...
- **force patent holders to grant licenses for electronic components**, rather than at the level of the end products benefiting from the added value provided by the patented inventions.

These large groups are thus seeking to evade their obligations to pay the inventors of the patented technologies used in their products and to have practically free access to the fruits of investments made by manufacturers and research centres working on new technologies such as 5G, intelligent cars, smart energy generation, new healthcare solutions, smart building and industry 4.0 manufacturing, while maintaining the protection offered by their own patents over their proprietary technologies that do not contribute to any standard.

2. The offensive initiated in the USA extends to Europe and, soon, worldwide

Cisco, HP, Intel and Dell announced on November 12, the creation of a new lobby group in Brussels, the 'Fair Standard Alliance' (FSA), whose objective is to 'globally promote, first of all in the EU and Member States, the Fundamental Principles regarding SEPs licenses under FRAND conditions' (sic), to bring the debate to policy makers and the European media, and engage in all forms of lobbying action to support the interests of the group.

The group announces the participation of Volkswagen, BMW, Sierra Wireless (Canada), Fairphone (Netherlands), Micromax (India), TELIT Communications (Italy) and other less well-known participants. The recruitment of BMW and Volkswagen by the giants of Silicon Valley comes as a major surprise. It testifies the fact that the battle around these issues will be amplified beyond the field of mobile telephony and will impact a wide-range of sectors of the economy such as automobiles, transport, health services, the production and consumption of energy, construction, and all of "industry 4.0" on which Europe depends to create high value jobs. The IEEE initiative has also received strong support from Indian mobile phone manufacturers, who recognize a miraculous opportunity for not having to pay royalties and China's position on the matter is still unclear.

3. The response is being organized and France Brevets will play its part with IP Europe

In terms of economic issues, Ericsson and Nokia/Alcatel are among the first European manufacturers affected. Ericsson has invested around \$5 billion to develop 4G/LTE technologies. A licence was granted to Apple, which expired in 2013.

France Brevets is directly involved as part of its mission to defend the interests of research centres and companies. France Brevets is also affected in its own interests. It has invested around €20 million to defend and promote the NFC patent rights of Orange and Inside Secure, a French mid-cap technology company. In 2012-2013 market conditions, before the emergence of the new IEEE rules, the expected valuation of these rights was estimated between \$200 million and \$250 million. If we were to strictly apply IEEE rules on a global level, this valuation would be reduced to less than \$10 million, which translates into an opportunity cost for France brevets in the order of \$80M.

In September 2015, France Brevets, alongside Airbus and Ericsson, created **IP Europe** which today brings together **Airbus, Ericsson, Orange, the Fraunhofer Institute and over 10 innovative European firms**, and which aims to protect the rights of inventors to receive a fair remuneration. This initiative is opened to European technology based SMEs. Several meetings have been organised since September with the European Commission by IP Europe, with the goal of alerting them to the threat posed by these new IEEE rules and to explore possible courses of action.

4. Europe must stand up and defend innovation actors

Various recourses are being considered against the way decisions have been taken by the IEEE, seemingly in violation of its own governance rules and in application of 'recommendations' made by the US Department of Justice. Such actions are currently under examination by both US companies (General Electric, Qualcomm, Dolby, Interdigital) and by other European actors:

- **Orange, TDF, Panasonic (R&D Department, Germany) and Sisvel (Italy)** submitted draft resolutions to ETSI (European Telecommunications Standards Institute) to counteract the impact of IEEE rules on ETSI, which are promoted by European subsidiaries of their IEEE US sponsors.
- **Orange, Ericsson, Philips, Siemens, Alcatel-Lucent, the Fraunhofer Institute, Qualcomm and Interdigital (USA)** filed an appeal on 19 October 2015 challenging the re-accreditation of IEEE with the American National Standards Institute (ANSI). These companies argue that the adoption of the new IEEE IPR rules was performed **in violation of IEEE and ANSI** procedures and, therefore, that IEEE should withdraw its ANSI accreditation.
- Several members of IP Europe members are considering requesting the European Commission to refer the matter to a **'panel' (tribunal) of the WTO** against the government of the United States of America. These companies believe that the IEEE rules are in contradiction with the commitments made under the WTO agreements in the context of **TBT** (Technical Barriers to Trade) and **TRIPs** (Trade-Related aspects of Intellectual Property rights).

IP Europe and France Brevets do not intend to engage directly in such confrontations. Nevertheless, we intend to support innovators in our capacity of recognised authority defending patent rights and with our ability to rally **French and European technology SMEs**.