

Apple and Ericsson countersued each other when negotiations on a fair, reasonable, and non-discriminatory (FRAND) licensing agreement over Ericsson LTE patents went sour in January, 2015. The two companies have been negotiating on a new license for two years. This fight is one battle in the on-going war between “standard essential patent” (SEP) licensors and licensees. On February 8, 2015, the Board of Directors of the Institute of Electrical and Electronics Engineers (IEEE), a standard setting organization, approved an update to its patent licensing policy which could help avoid costly litigation, but some licensors are pushing back.



Source: Ericsson.com Mikael Bäckström, Ericsson Nordic & Baltics and Erik Hallberg, Telia Sonera

“SEPs are patents that cover technologies that are considered an established standard in a particular industry... With the spate of technological convergence seen in the past decade or so, however, SEPs are becoming an issue for more and more sectors.”¹ Many feel it has become critical for industries to adopt standards rather than each company having its own version of the same patent. This reduces research and development (R&D) costs and reduces industry confusion, which leads to less litigation.

The IEEE’s aim is to define the framework for negotiating licenses based on the smallest saleable compliant implementation, for example on the marginal market value of a Wi-Fi chip rather than on the market value of an entire smartphone. The IEEE’s patent policy update² is intended to reduce potential litigation between licensees and licensors. However,

some IEEE members are conflicted on this issue despite its internal Patent Committee’s efforts to write a roadmap for creation of SEP pools.

There are companies and lawmakers who argue that the policy update weakens the value of patented technology. Companies holding standard essential patents like IBM, Nokia, Ericsson, Alcatel-Lucent, Blackberry, InterDigital, General Electric, Qualcomm, SanDisk and Panasonic have written to the IEEE to express concern that this policy change will affect their future participation in IEEE standards.³ They argue that the new policy will threaten innovation by disincentivizing inventors. These companies spend considerable resources to develop their hardware devices and control software leading to a concern that the new IEEE policy could blunt their ability to fully recover the substantial costs of their R&D. Recently, U.S. Senator Chris Coons (D-DE), a member of both the Judiciary and Appropriations Committees, wrote a letter to Attorney General Eric Holder arguing against the policy update.⁴



Source: huffingtonpost.co.uk

¹ <http://www.bna.com/standard-essential-patents-the-transactional-side/>

² http://grouper.ieee.org/groups/pp-dialog/drafts_comments/SBBylaws_100614_redline_current.pdf

³ <http://s3.amazonaws.com/sdieee/1806-SD+Section-IEEE-Standards-Patent+Policy+Dec-23-2014.pdf>

⁴ <http://ipwatchdog.com/materials/1-14-2015-Coons-IEEE.pdf>

While there are a number of companies expressing concerns around certain aspects of the new policy, the IEEE policy is intended to encourage participation in SEP pools and there are entities which support this. On January 30, 2015, Apple, Cisco, Lenovo, Intel, Samsung, Juniper Networks, Dell, Microsoft, Verizon, and numerous universities sent a letter supporting the IEEE patent policy update using the example of a “patent assertion entity which sought license fees of thousands of dollars per Wi-Fi chip against hotels and small retail businesses.”⁵ These companies understand that this policy will save legal costs and allow for more spending on R&D and job expansion. The Department of Justice (DOJ) issued a letter on February 3, 2015, stating that it would not interfere with the policy update as long as there were no antitrust violations involved.⁶

Despite the media’s focus on the effect of this policy change on Wi-Fi systems⁷, this decision has much wider applications in sectors such as cyber security, networking, biometrics, digital rights management, semiconductors, displays, medical devices, energy, transportation, life sciences, cloud computing, and much more.

The Apple and Ericsson patent litigation is a prime example of the problems which can be avoided by this policy update. The fact that Ericsson has filed its patent infringement suit against Apple in the Eastern District of Texas rather than in the U.S. District for Northern California speaks volumes about its intentions. The Eastern District of Texas is the federal district which Non-Practicing Entities, also known as patent trolls, often use to file frivolous lawsuits which can and do cost millions of dollars for defendants in document discovery alone, regardless of the merits of the suits.

Analysis

Using M-CAM’s proprietary analytical systems, we looked at Ericsson’s patents in the Apple suit and the assertion that these are standard essential patents for LTE.

Document #	Title	Assignee Name	Priority	File	Issue
US 8,214,710	Methods and apparatus for processing error control messages in a wireless communication system	Ericsson	2-Nov-07	29-Oct-08	3-Jul-12
US 8,169,992	Uplink scrambling during random access	Ericsson	8-Aug-07	8-Aug-07	1-May-12
US 8,036,150	Method and a device for improved status reports	Ericsson	1-Feb-07	28-Jan-08	11-Oct-11
US 8,023,990	Uplink scheduling in a cellular system	Ericsson	19-Mar-08	18-Mar-09	20-Sep-11
US 7,660,417	Enhanced security design for cryptography in mobile communication systems	Ericsson	10-Sep-04	10-Sep-04	9-Feb-10
US 6,985,474	Random access in a mobile telecommunications system	Ericsson	5-Oct-98	9-Jun-03	10-Jan-06
US 6,445,917	Mobile station measurements with event-based reporting	Ericsson	19-May-99	19-May-99	3-Sep-02

To make a determination about commercial fitness, we assessed Ericsson’s patents and commercially scored them using the M-CAM proprietary unstructured data mining algorithms. This assessment measured the commercial strength and transferability of each patent. Commercial patents are linked directly with cash flows and may have a basis for licensing. Non-commercial patents have little chance of being licensed, lack market relevance, or are direct liabilities to the holder due to prosecution impairments.

We found that five of the seven Ericsson patents represent innovation that is likely to be commercially viable and are likely *bona fide* standard essential patents. Two of the five patents lack commercial relevance according to our assessment based on the fact that they do not necessary represent positions uniquely held by Ericsson. In other words, while the innovation may be important, Ericsson is one of – not the only – holder of similar patents.

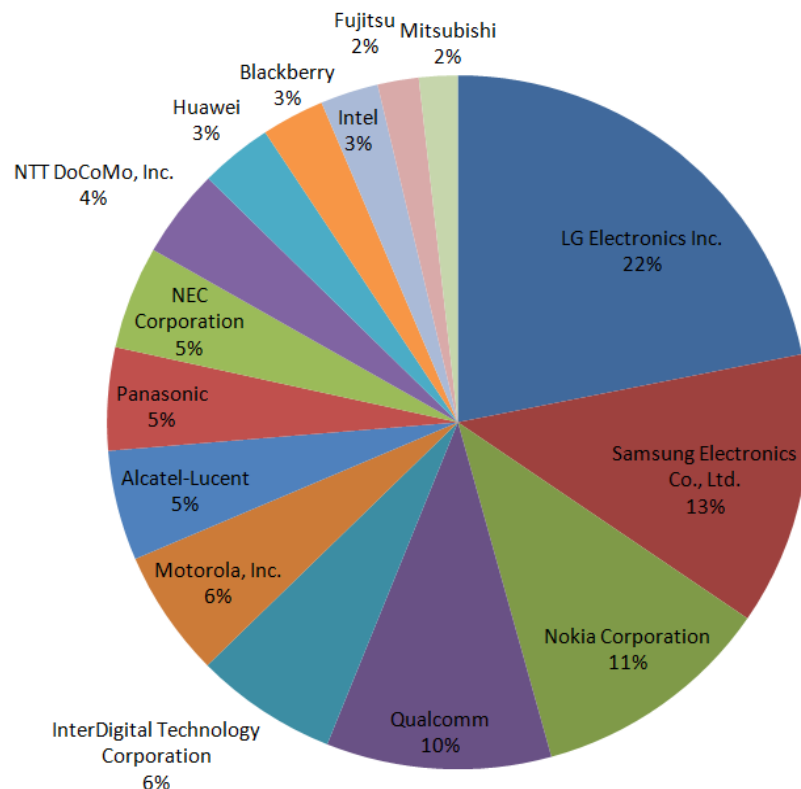
⁵ <http://www.scribd.com/doc/254487953/Jan-30-Letter-to-IEEE-Board-Rev>

⁶ http://www.justice.gov/sites/default/files/opa/pressreleases/attachments/2015/02/02/ieee_business_review_letter.pdf

⁷ <http://thehill.com/blogs/congress-blog/technology/228817-dont-turn-off-wi-fi>

Innovation Space

The following chart shows the top 15 entities holding the most *commercially relevant* art in the LTE Wi-Fi space by percentage.



Interestingly enough, many of these entities are the same ones who are threatening to leave the IEEE if it follows through with its patent policy update. Qualcomm, Nokia, InterDigital, Alcatel-Lucent, Panasonic, and Blackberry may leave, but the lack of cooperation from these companies makes it clear that their ulterior motives may reduce consumer confidence.

Conclusion

This case is similar to the long running fight between Motorola Mobility and Apple which was settled in May, 2014. Part of the fight in 2012 was around FRAND licensing where Apple claimed that Motorola's license was overpriced for elements in 3G phones.⁸ This is the type of litigation which the IEEE is attempting to avoid with its new policy update in support of robust standard essential pools.

The IEEE is taking an important step to form standard essential patent pools whereby the pools are licensed fairly and the licensor receives adequate compensation. Those companies which stand in the way may well be negatively viewed as seeking litigation rather than attempting to solve problems by creating efficient SEP pools.

For a more detailed examination of the patents mentioned in this report, please contact us at:
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⁸ <http://www.cnet.com/news/apple-talks-to-the-frand-to-reopen-motorola-patent-fight/>

M·CAM's Patent Glossary

<u>Aligned Sector:</u>	The business sector in which the product(s) resulting from the patent(s) is currently or intended to be sold.
<u>Applicant:</u>	The person or corporation that applies for a patent with the intent to use, manufacture or license the technology of the invention; under U.S. law, except in special situations, the applicant(s) must be the inventor(s).
<u>Application:</u>	Complete papers submitted to the U. S. Patent and Trademark Office seeking a patent including oath, specification, claims, and drawings. This usually does not signify a Provisional Patent Application, but only a regular patent application.
<u>Art:</u>	The established practice and public knowledge within a given field of technology. This also identifies a process or method used to produce a useful result. A term used in consideration of the problem of patentable novelty encompassing all that is known prior to the filing date of the application in the particular field of the invention.
<u>Assignee:</u>	The person(s) or corporate body to whom the law grants or vests a patent right. This refers to the person or corporate entity that is identified as the receiver of an assignment.
<u>Business Method</u>	
<u>Patent:</u>	A patent that controls the way a business process is undertaken. The issuance of these patents by the United States Patent and Trademark Office (USPTO) is new and controversial, since many allege that it is unfair to allow a patent on a way of doing business.
<u>Citation:</u>	This may include patents or journal articles that the applicant or examiner deems relevant to a current application. A reference to legal authorities or a prior art documentation are examples of a citation.
<u>Claim:</u>	The language in a patent application that defines the legal scope of the patent. Most patents have numerous claims. This is typically the single most important section in the application.
<u>Concurrent Art:</u>	Concurrent art occurs when related patent applications are being examined by the USPTO at the same time. It is difficult for any company or inventor to know, at the time they file for a patent, whether a “related” patent application exists.
<u>Filing Date:</u>	The date when a properly prepared application reaches the patent office in complete form.
<u>Innovation Cycle:</u>	A description of the commercialization timeframe for the intellectual property.
<u>Innovation Space:</u>	M·CAM's representation of the innovation(s) that occur before, during, and after the pending period of the subject patent. The innovation space is the first place to look for patents that are closely related to the subject patent and that may impact the defensibility of the subject patent or create opportunities for patent licensing.
<u>Issue Date:</u>	Not to be confused with the filing date, which is the date the patent application was physically received by the U.S. Patent and Trademark Office. This is the date on which the patent actually issues.
<u>Non-Aligned</u>	
<u>Sector:</u>	Any sector in which the patent can be used or sold, other than the sector for which the patent or resultant product was invented or intended.
<u>Pod:</u>	A group of patents owned by a company that should be treated as a single unit of innovation (e.g., a certain group of patents that comprise a single product or multiple related products).
<u>Prior Art:</u>	Any relevant patent that was issued before the patent being analyzed. If this previous patent was specifically mentioned in the new patent's application, the previous patent is referred to as “cited prior art”. If it was NOT mentioned, then that previous patent is referred to as “uncited prior art”.
<u>Subsequent Art:</u>	Any patent that has a filing date with the USPTO that is after the issuance date of the subject patent. This subsequent art patent may or may not have cited (see “Citation” above) the subject patent. As subsequent art represents more recent innovation than the subject patent, it has great potential to shrink the market opportunity for the subject patent.

A Brief Primer on the Patent System

In recent years, the importance of patents and intellectual property rights as an important variable in the marketplace has come to the forefront of the public consciousness as world leaders declare their country's lead in the innovation race. Damaging intellectual property litigation is becoming increasingly common across all industries. This is exacerbated when patent rights are granted for non-novel ideas. A vast amount of precedent innovation is unconsidered by patent-granting authorities in the creation of new IP rights. Patent granting authorities including the United States Patent and Trademark Office (USPTO), European Patent Office (EPO), Japanese Patent Office (JPO), Chinese State Intellectual Property Office (SIPO), Korean Intellectual Property Office (KIPO) and many others are constrained by the use of patent classification systems which are routinely circumvented by patent applicants.

There is a two-way social contract underlying the patent system. In the United States, patent terms are generally limited to 20 years from the date of application. By statutory intention, once a patent has expired, the patent holder loses the right to exclude others from fully utilizing any innovation described in the patent. A large number of patents enter the public domain when they are "abandoned" – when owners discontinue paying patent maintenance fees. Patents also only provide an exclusionary right in the country for which the patent is filed. As demonstrated by the Global Innovation Commons⁹ (G.I.C.), using intellectual property available in the public domain eliminates the need to pay licensing fees on those innovations in countries where the patent was never registered, or worldwide, if abandoned.

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⁹ <http://www.globalinnovationcommons.org/>