



US Patent Litigation Trends in Cloud Computing

09-04-2017

IPlytics GmbH

US Patent Litigation Trends in Cloud Computing

Cloud computing is often quoted to be one of the most significant innovations that will revolutionize the technology industry. In this regard, companies increasingly develop solutions and applications that run on cloud environments, manage cloud servers, or enable communication via cloud systems. Since businesses highly depend on the availability of cloud providers, clouds must be reliable in terms of down times or outages. However, cloud businesses want their solutions to be free of third party rights and the issue of a legal reliability for clouds has been raised.

Cloud computing forms a space where technologies are complex and different solutions convert. Therefore, it becomes very challenging for cloud-based companies to control if their solutions unconsciously infringe patented inventions. In this regard, an increasing number of corporations are filing for patent protection on cloud computing technologies or also acquire earlier filed patents to defend themselves from future litigation. Just recently Snap Inc. acquired a cloud-based geo filter patent from Mobli for a record amount of 7.7 million US dollars. Mobil was a Snap competitor that closed business years ago. However, Snap acquired the patent to ensure that the patent will not fall into the hands of an aggressive PAE (patent assertion entity) or competitors. Most likely Snap already implemented technologies that use the patented geo filter technology.

A recent study confirms that indeed the number of transactions of cloud computing patents has been quadrupled between 2012-2016. Especially PAEs increasingly acquire cloud patents to monetize cloud patent portfolios following enforcement strategies. While in contrast operating companies not only acquire patents to buy into certain markets but also to create a defensive patent portfolio.¹

In this study, we combine information on patent transfers and patent litigations to analyze how cloud computing technologies are affected by patent infringement lawsuits. In a first step, we make use of the IPlytics Platform database to perform an extensive keyword search² of worldwide filed patents in the cloud computing field. In a second step, we use the IPlytics database to identify cloud patents subject to litigation in US district courts and cloud patents subject to a patent trade (reassignment).

¹ "Patent Transaction Trends in Cloud Computing", February 2nd 2017, IPlytics, <http://innovation-economics.de/2017/02/patent-transaction-trends-in-cloud-computing/>.

² (Title_abstract_claims:(("cloud computing"~3) OR ("cloud computer"~3) OR ("cloud computers"~3) OR ("cloud server"~3) OR ("cloud servers"~3) OR ("cloud service"~3) OR ("cloud services"~3) OR ("cloud platform"~3) OR ("cloud platforms"~3)) OR ((cloud) AND ("web server"~3)))

The analysis reveals that the number of US patent litigation cases in the cloud space has been increasing over the past 10 years with a sharp rise in the last four years. Between 2012 and 2016 US patent litigation for cloud technologies increased by over 700%. Even considering that the general increase of filings of cloud computing patents tripled in the same time, these numbers are alarming. In 2016 almost 160 US litigation cases were about patented technologies in the cloud computing space.

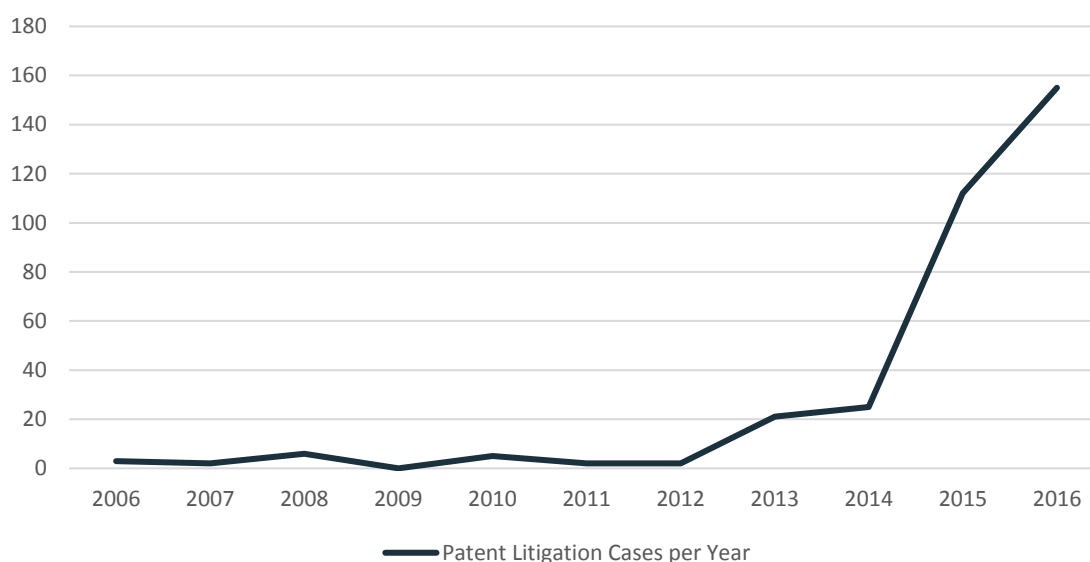


Figure 1: Number of cloud computing patent litigation cases in the US over time

To better understand the origin of the cloud related litigation cases we analyze the business model of the plaintiff of each case. Therefore, we make use of two public sites (plainsite.org, trollala.com) that list so called PAEs “patent assertion entities”; companies with the main purpose to monetize patents. Additionally, we use the IPlytics Platform company database to retrieve information about the main business activities of each company to refine the classification. Following this method, we differentiate between operating companies where the main business activity is connected to a product, technology or service in comparison to PAEs where the main business activity is related to the monetization of patents.

Figure 2 shows that so called PAEs have been responsible for the drastic increase of patent litigation since 2014. As of 2016, PAEs are responsible for over 50% of the cloud related patent lawsuits. PAEs are entities that in most cases enforce patents against purported infringers without itself intending to manufacture the patented product or supply the patented service. A common practice is that PAEs purchases patents, e.g. from a bankrupt firm, and then sue other companies by claiming that one of their products or technologies infringes on the purchased patent. To draw conclusions from

the relation of patent trade and patent litigation we match the litigated patents with data on patent transfers.

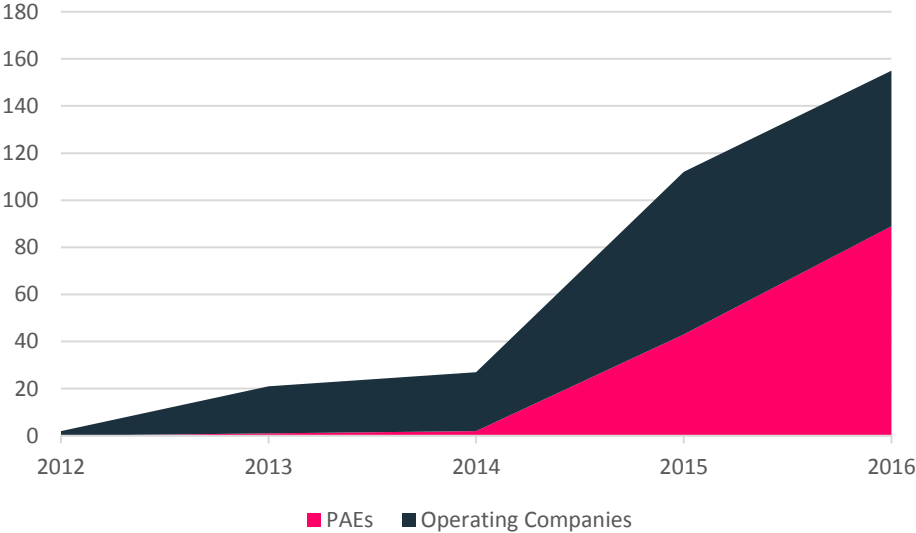


Figure 2: Number of cloud patent litigation cases in the US as to main business model of the plaintiff

The patent trade and litigation analysis reveals that 33% of the litigated patents have been traded at some point in time (figure 3, pink and yellow). The overall average number of traded patents in the US is at around 20% which confirms that litigated patents are more likely subject to litigation. Furthermore, we compare the date of trade to the date of litigation. Figure 3 displays that 29% of the litigated patents were traded before and 4% were traded after litigation.



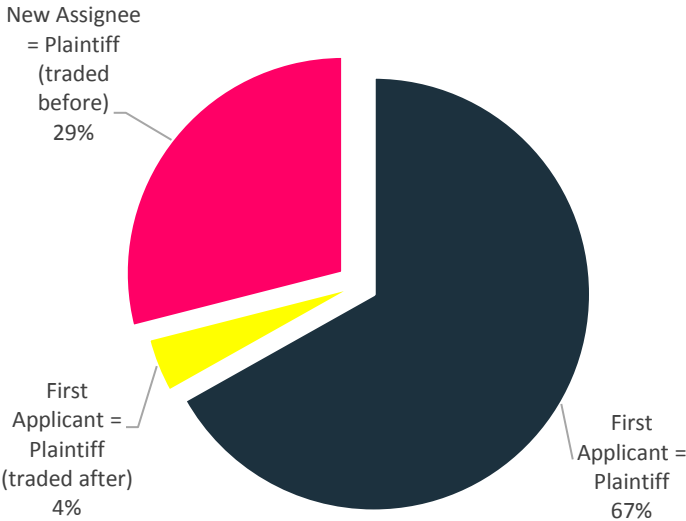


Figure 3: Litigation timing compared to patent transfer timing

We further match the data on the timing of patent litigation and patent trade with the information on a plaintiff’s main business model. PAEs are plaintiffs in over 160 patent litigations cases. In about half of the cases PAEs are the first owners of a patent before they litigate, while for the other half PAEs have acquired the patent before litigation from a different former owner. PAEs never sell patents after a litigation. Operating companies are in more than 80% the litigation cases the first owner of the litigated patent.

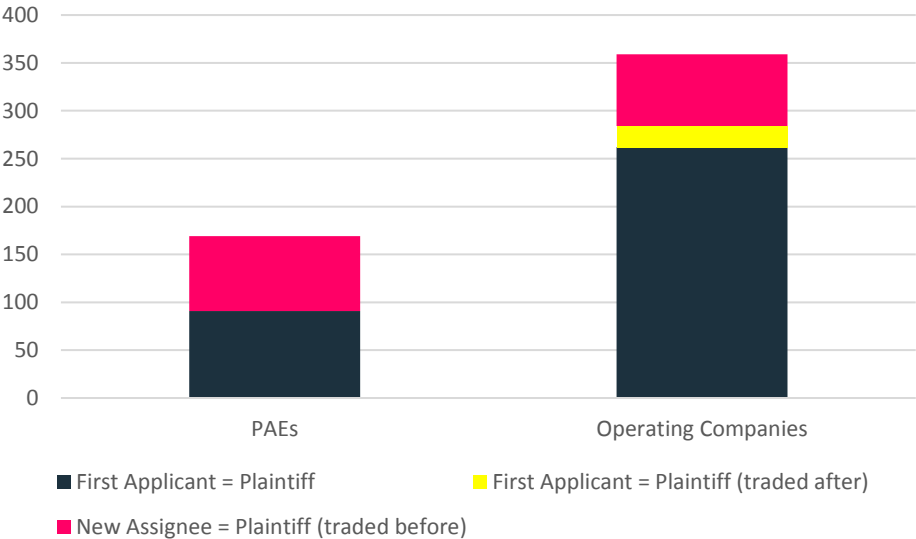


Figure 4: Patent Transfer Timing as to Main Industry/ Business of the plaintiff



Cloud technologies are often believed to fundamentally rely on shared environments following public standards. The study however shows that cloud technologies are increasingly subject to patent litigation. This may in fact block the open use and the commercialization of future cloud-based solutions. Cloud computing technologies are complex systems with millions of applications that are incorporated in various products or services. Broadly written patent claims may thus touch an unforeseeable range of cloud-based solutions creating unpredictable legal risks for every business that is based on cloud technologies.

About IPlytics

IPlytics Platform is an IP intelligence tool that augments the analysis of technology landscapes and a company's competitive position. IPlytics Platform goes beyond patent data by linking and processing over 80 million patents to patent litigation data, patent transfer data, as well as standard essential patent data and company financial information. IPlytics Platform helps users to perform analyses in the fields of patent valuation, landscaping, licensing, transfer or litigation. The intuitive graphical user interface allows to easily navigate, analyze and drill down into information, enabling in-depth technology analyses or a long-term monitoring of market segments.

IPlytics GmbH

Ohlauer Strasse, Entrance C,

10999 Berlin, Germany

+49 (0)30 5557 4282

Contact: Dr. Tim Pohlmann

pohlmann@iplytics.com

www.iplytics.com