Chapter 1
Introduction – Google Pushing the Boundaries of Law

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Allow me to recall the first time I heard about Google. It was in the beginning of 2000. I was working in Brussels. A colleague of mine recommended me a new web search engine that was far quicker than the ones we used to work with at that time. The first impression I got was not very good: the home page was all in white and not very attractive. But my friend insisted on how fast it was and he constantly made me check the upper side of the results where the astonishing figure of the approximate results and the time used to produce them are shown. Although the number of results was incredible and the time was usually less than a quarter of a second, I was not impressed. The reason might have been that, at that time, I was expecting an Internet portal to provide not only a web search engine but also content. Therefore, I kept working with other web search engines.

Little by little Google started to come up more often in conversations with my friends and colleagues. Due to this, and influenced by the need of being up to date, I started to use Google. More important than this was that, during those conversations, the same question always came up: how does Google make money? Only one of my friends had an answer – “thanks to advertising!”, and he explained to us the Google AdWords service – “companies pay Google for displaying small ads in the right side of the screen related to the words you introduce in the search box”. None of us could imagine that such a service might have the implications for trade mark law explained by Jeremy Phillips in Chapter 3 of this work. Basically, at that time, the only thing my colleagues and I thought was that our friend was “nuts” and that such a web site could not survive. In our defence, it has to be recalled that that was the time when the “dot-com bubble” exploded.

Time has shown that my friend was right and I was terribly wrong. In February 2010, the company founded by Larry Page and Sergey Brin in 19971 had almost 20000 employees and its market value was USD 136,383,466,440.2 In Fiscal Year 2010, Google revenues amounted to USD 29,321 million (48% from the US, 10% for UK, 42% from the rest of the world). 96% of those revenues came from advertising, the remaining 4% came from licensing of its search technology to other companies3.

What I did not understand in 2000 but which Google did perfectly, was that, in today’s knowledge economy, information has become a “commodity”. There is plenty of information on the world wide web. Everyone has access to it. If your business is providing information (content), it has to be very good to make it valuable in comparison to the information provided by others. If not, you cannot make money with it.

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1 “Google”, is a play on the word “googol”, the mathematical term for a 1 followed by 100 zeros. The name reflects the immense volume of information that exists, and the scope of Google’s mission: to organize the world’s information and make it universally accessible and useful. See Google History, available at http://www.google.es/intl/en/corporate/history.html (last accessed 29th August 2011).
What is valuable is the organization of that information. Google understood this from the beginning. In 2000, search engines were provided as ancillary to other services and content provided by Internet portals (and at least most of the people I knew at that time was expecting those other services). Google decided to focus on the thing they did best: search. Google became successful because they designed a search engine that was better and faster at finding the right answer than other search engines at the time.

Broadly speaking, the success of Google’s search engine is founded on three elements. First, the use of very powerful software programs called crawlers or “Googlebots” to constantly search the web for updates of sites which they have already indexed and for new information uploaded. Second, a very efficient technology to index all the information found by these crawlers. Third, the use of more than 200 criteria that allows a user, when typing a word in the search box, to find the most relevant website related to that word. Among those 200 criteria, the most important is PageRank®, an algorithm protected by patent in the US, and which determines the relevance of a web site according to the links that other websites include to it. This is claimed to be a “democratic” way to establish the relevance of a website. Placement in search results is not sold to companies by Google. It is exclusively based on the popularity of the web site on the web. Search results are listed taking into account what users have linked to – which is usually an indication of their appreciation, not according to which company pays the most.

Having attracted the attention of users thanks to the efficiency of their search engine, Google started to monetize its services in 2000 by selling advertising space to companies. As previously mentioned, this is done by means of Google AdWords. In this service, advertisers select words and phrases that are relevant to their business as keywords. When people use Google to search for those keywords, up to 11 “sponsored links” are displayed alongside the search results. Each time a user clicks one of those sponsored links, the advertiser pays Google.

The idea of providing services for free and to indirectly generate revenues through advertising is not new. For instance, it is used by public TV channels and free newspapers. However, there are important particularities that make Google’s advertising system particularly successful:

a) Ads in Google are contextualized and personalized: they relate to the information in the web page where they are displayed and they are personalized to the searches made by the user accessing the information. AdWords only shows sponsored links that are related to the terms introduced by the user in the search box: if the user looks for shoes, “sponsored links” of shoe companies will be displayed. This is extremely interesting for companies – they have more possibilities to sell their products or services – and users – the ads they see are related to things they are interested in.

While advertising on TV and other media can also be contextualized, the possibilities are much more limited. In addition to this, ads may change depending on the information Google has about the users visiting their web sites. As is explained later, Google works really hard in gathering this information since it is essential for their advertising services. As an example, ads might be personalized depending on the geographical location of the user: companies may decide that their “sponsored links” are only displayed if the user accesses Google from a computer with an IP address in a country where they offer their products.

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4 Internet advertising only represent 10% of the total advertising market, however Internet advertising keeps growing in comparison with other segments of this market.

5 Peguera 2010, p. 358.
b) Google provides services worldwide. This means that companies interested in subscribing to the Google AdWords services are located anywhere in the world. At the same time, these companies know that by using these services, they can reach users anywhere. While in theory this is also possible in other media, only a few companies can afford to make the investment this requires. With AdWords, SMEs and individuals can easily promote their products and services anywhere in the world.

c) Prices of “sponsored links” are not fixed. In order to get a good position in the list of sponsored links companies have to bid. While Google provides an estimated minimum bid needed to get on the first page of search results, it does not ensure that the best bid will automatically get the first position. The ranking of the different sponsored links is determined by a combination of the bid made by the advertiser when selecting the keyword and the so called “quality score”, based on relevance (how well the ad matches a user’s query), the quality of the landing page that the ad links to (the value of its content and how quickly it loads), and the ad’s past clickthrough rate (or, if it’s new, the rate of a similar ad), along with other criteria Google does not want to reveal6.

d) Advertisers in Google AdWords only pay if users click on the ad (“cost per click”). This last characteristic distinguishes Google from most online and traditional media advertisers and makes the service extremely attractive. Furthermore, Google enables advertisers to easily track the results of their campaigns – thanks to Google AdWords or Google Analytics, and helps them to improve their advertising strategy.

Since 2000 Google keeps improving its search engine with technologies like “autocomplete” or “Google Instant” having in mind that the most important thing is to provide users as fast as possible with what they are looking for. Thanks to this, at present, Google’s global search engine’s market share is 90.59 %7. In February 2010, it was reported that, worldwide, there were more than 3 billion searches on Google per day8.

But more important than this, Google has impressively expanded its offer of services and applications with one and the same idea in mind: attract Internet traffic to their web sites. This offer includes web-applications – Gmail, GoogleCalendar, GoogleReader, GoogleDocs or GoogleMusic –, improvements or specific applications of the search engine – GoogleNews, GoogleImages, GooglePatents, GoogleScholar, etc... –, a social network – Google+ - or a combination of services and content – GoogleMaps, GoogleStreetView, GoogleEarth, YouTube or GoogleBooks. It also provides tools for users that want to publish their own content – Blogger for blogs, GoogleSites for personal web sites or YouTube for audiovisual works – helping with the development of the so-called Web2.09.

Attracting Internet traffic is also the reason why Google provides the Chrome web browser, the Chrome operating system10 – for PC, laptops and netbooks – and the

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different versions of the Android operating system – for smartphones and tablets – for free and under open source licenses\textsuperscript{11}. At present, this latter software is used in 48\% of new smartphones worldwide\textsuperscript{12}. The fact that the software is given under an open source license allows third parties to have access to the source code in order to develop applications that are compatible with the operating system. Such applications can be published in the Android Market – for free or for remuneration. This benefits Google and the software developers.

The reason why Google keeps providing applications and services for free to attract Internet traffic is two-fold. First, the use of its services allows Google to collect much more information about users than that collected just with the different modalities of its search engine. Just as examples, Google keeps track of all the time we access its websites, collects the personal data we introduce to subscribe to its services, information on all our searches, on all the blogs and web pages we follow through GoogleReader and of the content of the e-mails we receive\textsuperscript{13}. As it has been said, giving away all that data for free is the price users pay for enjoying Google services\textsuperscript{14}.

The information collected by Google is essential to personalize advertising and it is extremely valuable for companies that want to advertise on the Internet. Certainly, the compilation of this information is the most valuable of Google’s assets and it is easy to understand the relevance of maintaining its exclusivity.

The second reason why Google is so eager in attracting as much Internet traffic as possible is easy to understand: the more services provided by Google, the more websites there are to place “sponsored links”. Furthermore, the more “sponsored links” are clicked, the more revenues for Google.

But Google’s strategy to maximize profits does not only consist in attracting Internet traffic, it also consists in improving its advertising services. Besides AdWords, Google created AdSense, a system to embed advertisements into third parties’ websites that have signed up to a partnership agreement with Google and, thus, belong to the so-called Google Display Network. These websites might belong to media companies (New York Times, El País), other service providers (eBay, Skype, MySpace), airlines web sites (RyanAir), or bloggers using Google’s Blogger application. Google shares a portion of its revenues with each publisher. AdSense displays ads based on the content of each particular site and on the data Google has about the user accessing it. The position of the ads in the list of sponsored links follows the same system as AdWords.

To further develop its advertising service, in 2008 Google acquired DoubleClick\textsuperscript{15}. Thanks to this, Google now offers a technology that allows embedding

\textsuperscript{11} Other strategic movements of the American company can be similarly explained: the extraordinary improvement of Google’s translation tools, agreements with software developers to provide the Google Toolbar bundled with software (Sun, Adobe, Firefox) or with browsers to embed the search engine in it (Firefox) or Google’s investments in infrastructures such as WIFI (Fon), satellites (O3b Network). Google’s frustrated adventure in the Chinese market is another example of this policy. 420 millions potential users was an attractive figure to accept the conditions imposed by China to provide its services. However it turned out that the censorship measures implemented by the Chinese government were unsustainable for Google.


\textsuperscript{14} Wauthy 2008, p. 72.

\textsuperscript{15} Other Google acquisitions are listed at http://en.wikipedia.org/wiki/Category:Google_acquisitions (last accessed 29th August 2011).
graphical ads into webpages. The technology allows advertisers to manage and track their display advertisements.

In addition to the information Google gathers from users accessing its services, this US company also uses cookies and other technologies to keep track of the computers from which websites belonging to the Google Display Network are accessed – and their users. This information is compiled in Google’s servers and it is used to make profiles of users in order to personalize the ads shown to them when they access websites of the Network. That is: Google can monitor your online behaviour within the network of affiliated websites and, according to this, provide you with ads that may be of more interest to you. This is so-called online behavioural advertising. Thanks to this, Google can provide more efficient advertising services to the companies belonging to the Network. At the same time, the bigger the Network grows, the more information Google collects from users.\(^\text{16}\)

The latest steps in Google’s deepening of its business model are the acquisition of AdMob in 2009\(^\text{17}\) and of Motorola Mobility in 2011. The first company provides mobile advertising services – “in-app ads”, that is ads embedded in applications downloaded in portable devices –, a market that is expected to reach 3.3 billion dollars by the end of this year and 20.6 billion by 2015\(^\text{18}\). In part, this is due to the fact that more and more people are substituting computers by mobile devices as the main means to access the Internet. At present, AdMob worldwide market share is above 40%\(^\text{19}\). In October 2010, Google announced that mobile ad revenues would reach 1 million dollars on an annualized run rate\(^\text{20}\).

The recent acquisition of Motorola Mobility (and its patent portfolio) by USD 12.5 billions should help Google to consolidate its position in this market for at least two reasons: it will provide Google the option of producing its own hardware devices and it will allows the company to fight the more and more frequent patent infringement claims against Android. Furthermore, Motorola owns technology which seems to be very useful for the development of other big project, Google TV, thanks to which the Mountain View’s company might be able to expand its business model to television.

While there is no doubt that Google’s business model has proved successful, it has also become obvious that it presents a challenge to the law. Google seems to be imposing its ambitious business model without taking into account restrictions and checks and balances established by law. Therefore, it is not surprising that Google’s activities have given birth to a great number of lawsuits and to a rich case law all over the world. In this sense it can be affirmed that Google is pushing the boundaries of the law.

\(^{16}\) Peguera 2010, p. 362.

\(^{17}\) In 2010, Google tried to buy Groupon, “a mediation platform that connects people seeking bargains with merchants who are willing to provide them” (See Arabshahi, Undressing Groupon, An Analysis of the Groupon Business Model, available at http://www.ahmadalia.com/download/Undressing-Groupon.pdf, last accessed 29th August 2011). After Groupon rejected the offer of Google, the American company announced the launch of the competing service “Google Offers”. At the time of finishing this book, the service was not available yet.


The aim of this book is to provide a legal assessment of the most relevant disputes where Google has been, or is still involved in, mainly from a European and US law perspective. Some of them relate to the first and still best known service developed by the company: the search engine. As Sophie van Loon explains in Chapter 2, Google is accused of listing their partners’ web sites higher in the results list to the detriment of its competitors. Could this conduct be considered an infringement of EU Competition rules? Are there other business practices of Google in danger of infringing these rules?

A second group of disputes concern the most important aspects of Google’s business model. First, the AdWords service: in Chapter 3, Jeremy Phillips reviews the treatment of this, Google’s core service, by the Court of Justice of the European Union. Second, the collection of users’ information: in Chapter 4, Bart van der Sloot and Frederik Zuiderveen Borgesius discuss whether the tracking of users’ online behaviour by Google is in compliance with European privacy standards.

A third group of controversies relates to the services and applications developed by Google to attract Internet traffic. Bart van der Sloot and Frederik Zuiderveen Borgesius also deal in Chapter 4 with the problems concerning Google Street View: are the photographs showing people in this service an infringement of the right to privacy? What about the interception by the Street View cars of Internet traffic via Wi-Fi Networks? In Chapter 5, Raquel Xalabarder explains whether the complaints of online newspapers towards the GoogleNews service are well founded. Miguel Peguera examines some of the most relevant case law in Europe and in the US concerning the compliance of Google Images and Google Cache with copyright law (Chapter 6). Annnsley M. Ward deals with the “YouTube v. Viacom” litigation in Chapter 7: is Google liable for providing users with the tool to upload video clips in YouTube potentially without the consent of the copyright holders, or does it benefit from the safe harbour provisions in the DMCA? Finally in this group, Gary Rinkerman gives his opinion in Chapter 8 on what will happen now that the GoogleBooks Settlement has been rejected by Judge Chin.

A fourth group of questions relates to Google’s software and APIs (application programming interfaces). Chapter 9, written by Malcolm Bain, analyses the particularities of the free / open source licenses used by Google to release Android and Chromium. In Chapter 10, Andrew Katz explains how Google implements terms and conditions for access to their cloud services, the threats posed by closed APIs, and what legal regulation may exist to counter those threats.

Finally, the book includes three chapters that are not focused in one particular service or application, but focus on Google’s activities in general. The first is written by Danny Friedmann and aims to identify the lessons we can learn from Google’s frustrated adventure in China (Chapter 11). The second is written by me and its objective is to argue whether the existing rules of Private international law could become an obstacle for the provision of Google’s services internationally? (Chapter 12). Finally, Marcelo Thompson explains the implications for Google of the on-going Net Neutrality debate.

As it is expected from a Law book, most of the articles discuss whether Google’s services are in compliance with the existing legal order. However, that is not our only purpose. More important than that, this book aims to provide a deeper reflection: are current legal systems adapted to the Google business model? Are they adapted to the business activities that are flourishing in the digital environment? Are the present rules conceived for an industrial economy? Do they obstruct the development of businesses in the knowledge economy? Do the various lawsuits involving Google show an evolution of the existing legal framework that might favour the flourishing of these
businesses? Or do they simply reflect that Google has gone too far? What lessons can other knowledge-based businesses learn from all the disputes in which Google has been or is involved?

I hope this book gives you the answers to these questions or, at least, makes you reflect on them.

I do not want to finish this introduction without recalling a verse in Tom Petty’s song, *American Girl*: “God, it’s so painful when something is so close and still so far out of reach”. That’s how I felt the first time the idea of editing this book came to my head. Fortunately, I found a bunch of devoted colleagues that made it possible. I thank them for that.

Alicante, 30th August 2011

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