

Chapter I

About Intellectual Property (IP) and Patents

Defining IP and IPO

What is an “IP” and what is an “IPO”?

IP stands for **Intellectual Property** and IPO stands for **Initial Public Offering**.

I chose these simple words, IP and IPO, since they delineate a beginning point and an end point (also called an Exit) in the life of a technology based company or start-up. This book is specifically intended for students, early stage inventors or innovators as well as for more advanced entrepreneurs who are at their second and third attempt to start a new company.

The Copyrights, Trademarks, Patents and other issues relating to Intellectual Property will be discussed in the first chapter of this book while the IPO and other types of “Exits” will be detailed in the last chapter.

Let us look at Wikipedia to find a definition for Intellectual Property (IP):

http://en.wikipedia.org/wiki/Intellectual_property

“**Intellectual property (IP)** is a number of distinct types of [legal monopolies](#) over creations of the mind, both artistic and commercial, and the corresponding fields of law.^[1] Under intellectual property law, owners are granted certain [exclusive rights](#) to a variety of intangible assets, such as musical, literary, and artistic works; ideas, discoveries and inventions; and words, phrases, symbols, and designs. Common types of intellectual property include [copyrights](#), [trademarks](#), [patents](#), [industrial design rights](#) and [trade secrets](#) in some jurisdictions”.

In other words, any idea or unique process that you can think of, can be protected by law and the commercial rights to your idea or process will be owned by you for a period of about 18 years.

To start a technology based company you must have a unique idea, design or a process. How do you come up with such ideas? First off, you do not have to be a genius and invent a new drug that will cure cancer, to qualify as an inventor. Many of the new inventions, ideas come for normal day by day activities. How often do you see a certain product or a service that is not satisfactory? How often do you ask the question “isn’t there a better way”? You will be surprised how many inventors see an opportunity in these products or services. Others recognize that there is a need for something and they act on it (to supply the need) thus, turning the opportunity into a company. For very little money and minimal research one can take these opportunities and turn them into IP. It is true what they say: “The **need** is the mother of invention”. My own company, Giltronix Inc. was started in 1978 in Palo Alto, California (with \$3,000 of savings) by realizing that there was a need for something that did

not exist. Seven years later it turned into the leader in its industry and sold thousands of products worldwide. (In 1983 Giltronix, Inc. was approved by the SEC to go public on the NASDAQ Stock Exchange). What was the specific need that I recognized at that time is not important for this discussion. The point is, that any idea and observation of any service that is not satisfactory can be turned into IP and when you have IP there is a good chance that you can start a company or to derive some commercial benefit from it. We will discuss in detail the process of turning an idea/design into an IP.

First steps when you get an idea for a business or a technology

Since 1978, I worked on hundreds of ideas some successful some that did not take-off at all. In the process I have patented a number of products (see the US PTO www.uspto.gov or the PCT www.wipo.int databases under “Abraham Gill” as the inventor).

Over the past 30 years I developed a process I call “poor men’s patent process”. This process, if followed correctly, will give you a number of significant benefits and will keep initial patenting costs very low.

1. When you get an idea (even in the middle of the night) take a few moments and write it down on a piece of paper or a small note pad. For many years, I keep a pencil and a notepad on my night table. You do not have to be descriptive. Just summarize your idea in two or three sentences. This is mainly to remind you in the morning to do something about this idea.
2. In the morning, or at your most convenient opportunity, take this idea and do a “Google search”. Use the most common keywords that you can think of that describes your idea. Many of my own ideas died at the very early stage after checking with Databases (before the existence of Google). Here are some reasons:
 - a. The idea already exists (if a company has a web site using the same name as your idea, do a lot more investigation before you continue).
 - b. Too many entries in Databases (Google) with the same keywords.
 - c. An initial patent search (this will be described later) indicated that there are similar patents.

What if you cannot find similar keywords or entries or patents? In this case you should take your idea and write it down in a “Record Book”. The record book is a notebook that has every page numbered (see figures 1 & 2 as well as Appendix C). You can find a record book in any stationary store (Office Depot, etc). After you

described in detail your idea, have a friend or family member sign and date at the bottom of the description. You should also sign and date your idea (see figure 3).

The next step is to make a copy of the description. Make sure the page of your notebook is clearly visible in the copy. This copy should be sent in an envelope to your own home address. Make sure you mark the page number of the notebook you copied on the outside of the envelope (see figure 4). When this envelope reaches the post office, it will normally get a “date” stamp before it is delivered to your home (see figure 4). It is very important NOT to open the envelope when it arrives. Make sure you tell your family (spouse and children) that you expect an envelope addressed to yourself and they should not open it.

The reason for all this is to establish a date when you perceived your idea. Many times this sealed envelope will help you prove when you had your original idea. As we proceed with other steps in the patenting process you will see the significance for proving when you had the idea. The cost of the above process is the cost of the postage stamp and the copy. Since the Record book will be used many times in your lifetime the cost is insignificant. I use two notebooks. I keep one in my office and one at home. There is no need to write the same idea on each book. It is enough to write in one book. The other book (if you decide to keep) is for convenience.

Now that you established a date of your invention the next step is to keep the information confidential. If you talk to everyone about your invention the dated envelope is not going to help you much. You must keep your idea confidential and to mention the idea ONLY to people who must know about it (a partner, a business associate, etc). It is a good idea to have anyone who you speak with about your idea sign a Non Disclosure Agreement (NDA) (see Appendix D). Most people will not object to signing such an NDA since it only protects you if the idea is your own original idea and it is found in the public domain (in other words, this idea is not public knowledge – on the Internet, etc). If it can be proven that on the day they signed the NDA your idea was public knowledge or became public knowledge through no act or failure to act by them (the recipient), the NDA is null and void. See Appendix D paragraph 8 in the attached suggested NDA format. Since the NDA is a legal document it is good to consult an attorney who can modify the NDA to your specific needs or can suggest a different form of protection.

About Provisional Patents

In the days or weeks following the “envelope process” you should consider filing a “Provisional Patent”. For a full description of the Provisional Patent see the documentation at the US PTO web site www.uspto.gov as well a sample Provisional Patent in Appendix B. In a nut shell, a provisional patent allows you to protect your idea for a period of 12 months from the date the provisional patent is recorded at the US PTO. The forms required to file a provisional patent are also available from the www.uspto.gov web site. To fill the forms is very simple (see Appendix B). The cost of filing the Provisional patent is \$105.

What are the advantages and disadvantages of filing a Provisional Patent?

Advantages:

- a. Low cost (about \$105 + postage and copies)
- b. Upon registering the Provisional Patent you can mention in on your documentation (data sheets, description, etc) that your idea (or product) is Patent Pending. This tells your readers that you are serious about protecting your Patent (Intellectual Property).
- c. The most important advantage of a Provisional patent is that the filing date (also called the priority date) becomes the original date of your patent even if you start the Full Patent Application a year later. A full patent application is normally filed with a Patent Attorney and it is a time consuming and expensive process. To give you an idea, a normal patent may take 3 to 6 months to be drafted and the costs could be between \$10,000 to \$25,000. Why is the original date so important? Many patents are developed in parallel all over the world. Many times to patents are issued on the same idea but with different original dates. Guess which patent has value and which patent loses its importance? If you said the earlier patent date is stronger you are correct. Now you can also see the importance of establishing a legal way that proves when you had your original idea.

Disadvantages:

- a. If you do not file a Full Patent Application before the Provisional date expires you lose all rights and you may have to start a new Provisional Application

- b. Time must be spent on the description of the idea before the filing of the Provisional Patent
- c. It is desirable to add at least one general claim (see Appendix A). For an explanation of a claim see the US PTO web site. In layman terms a claim is what you intend to “claim” in your patent. If your claim is too broad you may have difficulty defending your patent (this will be described later). If your claim is too narrow, someone who sees your application may write a patent that claims your original idea but in areas you did not cover with your narrow claim.

Turning your idea or invention into IP and deriving commercial benefits.

Let us assume that you have an idea and you followed the initial steps detailed above. You already conducted an initial search by yourself or by a professional search company. You also filed the Provisional Patent. Now you are at the point where you ask yourself what to do next.

1. Even before filing a Full Patent Application (which is very expensive) you can talk to people in the industry related to your idea or invention. As we said earlier all the people you come in contact with should sign an NDA. The discussions could be directed towards a joint development effort or selling the idea before you file the Full Patent Application. Do not expect that the very first company you talk with will jump on your idea and will offer you money or some cooperation. In most cases it takes many meeting with many people before an offer is placed on the table. Even in the best case, if you do get an offer from the first meeting, it is advisable to speak with at least one or two more companies before you start negotiations.
2. Keep in mind that any company with minimal experience in IPs and Patents know that all you have invested is \$105 and some of your time. To overcome this situation you have to inform the companies that you fully intend to convert the Provisional Patent to a Full Patent Application and you are seeking funds from family, friends and Angel Investors to finance the costs of the Patent Application.
3. Assuming there is an interest in your idea and indeed there are some reasonable offers, you should consult with a business attorney and draft an agreement. In most cases, the company who you are talking with will propose

a deal and will present you with a draft agreement. Take the agreement to a business attorney and seek professional advice.

4. If you do not get interest in your idea try to remember the reasons given by these companies. If they said this is not an area of interest, you must seek other companies who are more likely to be interested in your idea. If they said they are also thinking about this idea and some of their people have written up some proposals along the same lines, this could be a warning that they are contemplating taking your idea or that in fact some of their people really developed something along these lines. Assuming they signed your NDA you do not have to worry about foul play but you have to check from time to time if the company had developed their idea or not. If they took your idea and decided to develop something themselves, you will be able to prove in court that they have taken your original idea (you have the sealed envelope and the Provisional Application date). If in fact they really have something that proves that their idea was recorded (Provisional Patent, or a Full Patent Application) prior to your own “envelope date” you are out of luck and this would be a good point to consider abandoning your idea.

5. In case there is interest in your idea you should consider several options:

a. Licensing your IP

b. Co-developing

c. Outright sell of the commercial rights

A. In case of a **License**, the issues you will need to address are relating to exclusivity or non-exclusivity. If the company wants an exclusive license you must view this as your only opportunity to make some money on your idea/invention. If for any reason this does not work out, you may not be able to negotiate with other companies. If in the other hand the company is not seeking an exclusive license, you may start discussions with other companies (in the same industry or a different industry). The most common Licenses will offer you a percentage of the sales (royalty) generated after your idea is developed and integrated into a sellable product. This means that you may have to wait a year or

two or more, before you start generating some money. The usual percentage rates (also called royalty) are from 2 or 3 % to 10%. The actual figure depends on many things but a good business attorney will be able to help you maximize your income from the license. One important issue to keep in mind is the percentage of sales versus a percentage of profit. If they offer you a percentage of the profit they make from the sales of a product, be very careful. Companies can shift overhead and other expenses to inflate the costs of your products hence minimizing the profit (so they can pay you less). A better alternative is to insist on a percentage of the actual sales as companies are more careful and must record sales accurately. There is also the issue of how many years will the company pay the royalties. If the number of years is tied to the life of the product it could be very short (which means you will receive royalties only 2 or 3 years)

- B. **Co-developing** is a good idea to maximize the commercial benefits of your idea/invention. Under this scenario the company will make you and offer to be hired and to develop your idea by yourself or together with a team of company employees. During the development period you will be paid a salary and when the product actually starts selling you will receive a royalty. In this case, since the company has paid you wages, benefits, etc. the royalty may be substantially lower than what you could get if you did not work for the company. If this is proposed to you, you should give it serious considerations.

- C. **Outright sell** of the commercial rights. In this scenario, the company may offer you a lump sum to transfer the rights of your patent. You **do not** have to have a Full Patent Application to sell the commercial rights of your idea. If you did not yet file a Full Patent Application, the company will do so in your place. To keep the initial date of the Provisional patent, the company will ask you to continue to be the author of the patent/idea but will require the assignment of all commercial rights of the patent to the company. There are no rules on how much a company will pay for an idea they like and which they would like to have exclusive commercial rights. The range is from 5% to 15% of the total sales that the

patent will generate over its lifetime. The figure changes depending on the stage of your provisional patent and other parameters.

There are other options for capitalizing on an idea or invention but the most common are mentioned above.

Another option available to the inventor/entrepreneur is to get together with a few friends and/or colleagues, create a strong management team, raise the funds needed and start a new company. We will discuss this option in the following chapters.

About Patent Searches

As mentioned earlier, the issue of patent searches is very important since it may (in some cases) cause the abandonment of an idea or mislead you in thinking there are no such ideas when in reality there are.

Here are a few hints that will help you in your initial search:

- A. Identify keywords that describe your idea. The success or failure of your initial search depends on how wisely you select the keywords. Make a list of all possible keywords that describe your idea even if they are not exactly matching your idea.
- B. Start your search with the most likely keyword and later search for all the other keywords in your list.
- C. If you cannot define your idea in one single keyword use two words. Make sure to use the quotes: "keyword1 keyword2" in your Google search otherwise you will get thousands to hits that are for keyword 1 and thousands more for keyword 2 without any relationship. If your idea is defined by quotes Google will only display those hits that are relevant to your search.
- D. If you are not familiar with the Google search, go to www.google.com You will see a rectangular box about 4 inches wide. The cursor should be already in this box. Just type in the keyword (or keywords) in this box and press the enter key on your keyboard or click on the search button with your mouse. You will get a list of thousands or millions of "hits". A hit is a reference or a web site that matches your keyword. If you get too many hits do not get discouraged, there are many ways to narrow down your search. For example if you look for a particular keyword you may request all the hits in the USA (or any other country). To do this; start a new Google search and re-enter the keyword but this time, add the word USA to it. This will narrow your search to only hits in the USA. If you do not specify a country, Google goes out and looks all over the world and looks at every web site in every country around the globe. If in fact you want to look at all the hits in all the countries you need to come up with another way to narrow your search. For example: If one of your keywords is: ringtone. Ringtones are these funny sounds (tunes) coming out of cell phones when someone calls you on your cell phone. If you entered the word ringtone in the rectangular box at the Google web site

(www.google.com) you will get a list of 65 million hits. However if you type: “ringtone USA” you will only get 37 thousand hits. This is still a huge number but it is considerably lower than 65 million. If you want to look only at web sites that contain the keyword ringtone, you will enter: “ringtone.com USA”. Now Google shows only 1 hit. Another hint on how to narrow down your searches is to use filetype:doc, filetype:pdf, filetype:ppt etc. This will narrow down your search to only the specific files you indicated. Let us say you want to find any Power Point presentations (ppt files) that are related to your keyword “ringtone”. You will enter the Google web site and you will type: ringtone filetype:ppt. Now Google will indicate that it found 416 ppt files with the keyword “ringtone”. This is quite useful since you will find many companies and their Power point presentations with your specific keyword. Now you can find potential competitors or perhaps some companies who may be interested in your idea.

- E. There is much more to keywords and keyword searches but you get the general idea and you can start experimenting. It should be mentioned that there are other search engines (Grokker, TouchGraph, etc.) that give you more focused information but I found that Google is the best after you learn a few tricks.
- F. After you have done some Google searches it is time to look at the two most popular patent databases: US PTO www.uspto.gov and the European Patent Convention Org www.wipo.int . Let us search for any patents that contain the word ringtone. If you start with the www.ipo.int you will need to select the database search option on the web site. After you click on the database search you will have further selections: PCT, External Databases, Patent Analysis, etc. Click on the PCT option. Now you will see a table with many rows and columns. You need to enter your keyword on the top where it says: Keywords Front Page =. Enter ringtone in the box where you see the “=” sign and click the Search button at the bottom of the table. Now you will see a list of 24 records. Each one of these records is a Patent that mentions “ringtone” in the Front Page of the Patent. A patent has a Front Page where you will see summary data about the patent. A patent may also have several pages of claims, drawings and other information. The most useful information is always on the Front Page. Here you will find the Applicant or Applicants (These are normally the company (s) who are filing the patent, the name (s) of the inventor (s), the title of the Patent, the Priority date (this is the date when the

Provisional patent or the Full Patent was filed. Earlier we called this date the “envelope date” etc. You can also find on the Front Page the Abstract which gives a summary of the patent. In some cases, if you do not find any patents matching your keyword, you may want to select the any filed option. This will scan all the patents in the database and will look at all the pages (fields) (not only the front page). If we do this for the ringtone keyword and we specify all fields (this selection is right under the front page) you will get 490 patents that use the keyword ringtone.

- G. Going over the 24 patents you found earlier is very important as you may find some patents that are identical or similar to your idea. If you find one or more patents that are identical or similar, it is advisable to consider abandoning your idea without incurring any additional costs. Now you also see the importance of doing the keyword and patent searches before you start talking to companies about Licensing, Co-developing, etc.
- H. Let us now look at the US PTO web site and do a similar search on the keyword ringtone. We enter the www.uspto.gov web site and we select patents option on the left side. Upon selecting Patents a window opens and it allows you to select “search patents”. After you select the search patent option you will be given a new option “Patent Applications” or Issued patents. A Patent Application is a patent that was filed but did not yet receive an issued status. Normally it takes 2 to 3 years from the time a Full Patent Application is filed and the time when it is issued. Assuming we are only interested in issued patents, we will select that option and will try first the Quick Search. Now you will see a few blocks that are labeled terms, fields, etc. Enter the keyword ringtone in Term 1: and select Abstract in Field 1 and click on the button labeled Search. The results of the search are 12 issued patents were found that the keyword ringtone is mentioned in the abstract.
- I. Going over these 12 patents is very important as mentioned in paragraph G above.
- J. Since we are wondering how many patents mention the keyword ringtone it is also important to search the Patent Applications even if they have not been issued. To do that we select the other option given at the Patent search web page. Again we should try the Quick Search first. At this point you will be shown again a few boxes labeled Term 1, 2 and Field 1, 2. Let us enter the keyword ringtone in Term 1 and select the Abstract at Field 1. If you have

more than one word that is defining your keyword you can enter the second word in Term 2 and do the search again. In our case, after we entered ringtone in Term 1 and Abstract in Field 1 we obtained 66 patent applications that contain the keyword ringtone in their abstract.

- K. Like in the case of the Google search after a while, you become familiar with the ways to narrow your searches until you are sure you see only the relevant patents (or patent applications)
- L. In conclusion of the Search section one should keep in mind that there is always the possibility that you missed one or more significant patent. If you do a thorough search as indicated above your chances of missing a significant patent is minimized. After you are satisfied that nobody has the same idea/invention you can proceed with meetings with potential buyers or alternatively starting a company who will develop your idea into successful products.

About Copyrights © and Trademarks™

Copyrights can be registered at the US Copyright Office www.copyright.gov.

A copyright © indicates that the author reserves the “copy rights” of his original work. This book is © 2007 – 2009 Abe (Abraham) Gill. This means that I reserve the right to allow or not to allow anyone to copy or distribute any part of this book. Any original work, artwork, design, etc. can be copyright. Many people do not know this but software (the long list of codes and symbols used by computers) can also be copyright. To properly register your artwork, text or software see the instructions at the US Copyright Office www.copyright.gov or other authorized agencies in the country you live in. There are very simple registration procedures by mail or on-line. For quick on-line registration of your copyrights go to:

<http://www.copyright.gov/register/literary.html>

Before you start registering I strongly suggest reading the eCO Tutorial:

www.copyright.gov/eco/eco-tutorial.pps , eCO tips: <http://www.copyright.gov/eco/tips.pdf> and eCO FAQs: <http://www.copyright.gov/eco/faq.html>.

Trademarks can be registered at the US Patent and Trademark Office:

<http://www.uspto.gov/main/trademarks.htm>

Anyone can trademark a product, a name used in commerce, a phrase, etc. There is no need to register a trademark before you can use it. For example, I trademarked DMwl Entrepreneurship™. Notice I added the symbol for trademark:™. This is perfectly legal and

even desirable if you want to reserve your rights under the trademark rules. Anyone who wishes to use DMwl Entrepreneurship will quickly notice that this is a trademark since the ™ symbol is attached. There is no need to add ™ every time I use the words DMwl Entrepreneurship. It is sufficient to add the ™ symbol once at the first instance you use your trademark but make sure you add in front of your document (s) the following statement:

© Copyright 2007 – 2009 Abe (Abraham) Gill * The CBRM, DMwl and CBRC are Trademarks of Abe (Abraham) Gill.

After proper registration at the US Trademark office you will be able to use the ® symbol instead of ™. Your trademark rights can be enforced only when you have an ® symbol.

The Google Case Study:

As shown in Table 1 Google is ranked # 1 in our InnoCreative Research. It received 985 points out of a maximum of 1,000 points. This is indeed a very impressive performance.

As will be shown in Chapter IX the focus of this research and the maximum Criterion weight (30%) was given to the “Dream Factor”. This factor looks at companies who offer “dream time” to their employees to come up with new ideas. At Google they call this “Innovation Time Off” (ITO). Each employee is given 20% paid time off to work on their “dream” projects. According to Google this philosophy resulted in many new products and is considered a success. We should mention that the “dream time” was not invented at Google. It was 3M who first introduced this concept. 3M offers 15% “dream time” and over the years, it also resulted in many new products. 3M was ranked # 4 in our InnoCreative list and will be discussed in detail at the end of Chapter IV.

Table 2 below shows the ranking of the top InnoCreative companies in a Bar Graph.

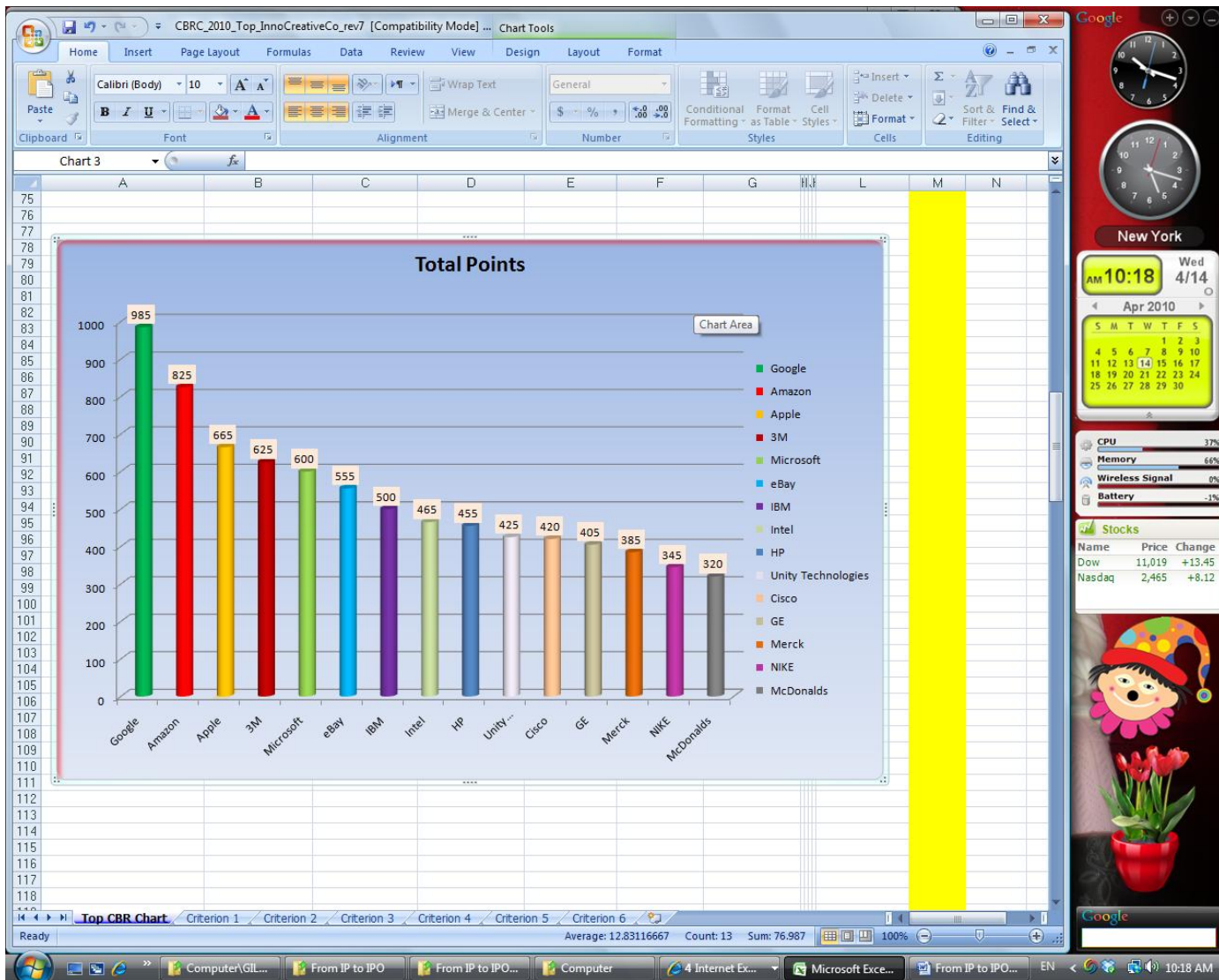


TABLE 2

Table 3 below shows the ranking of the InnoCreative companies based on the “Dream Factor” and other Creativity programs offered by each company.

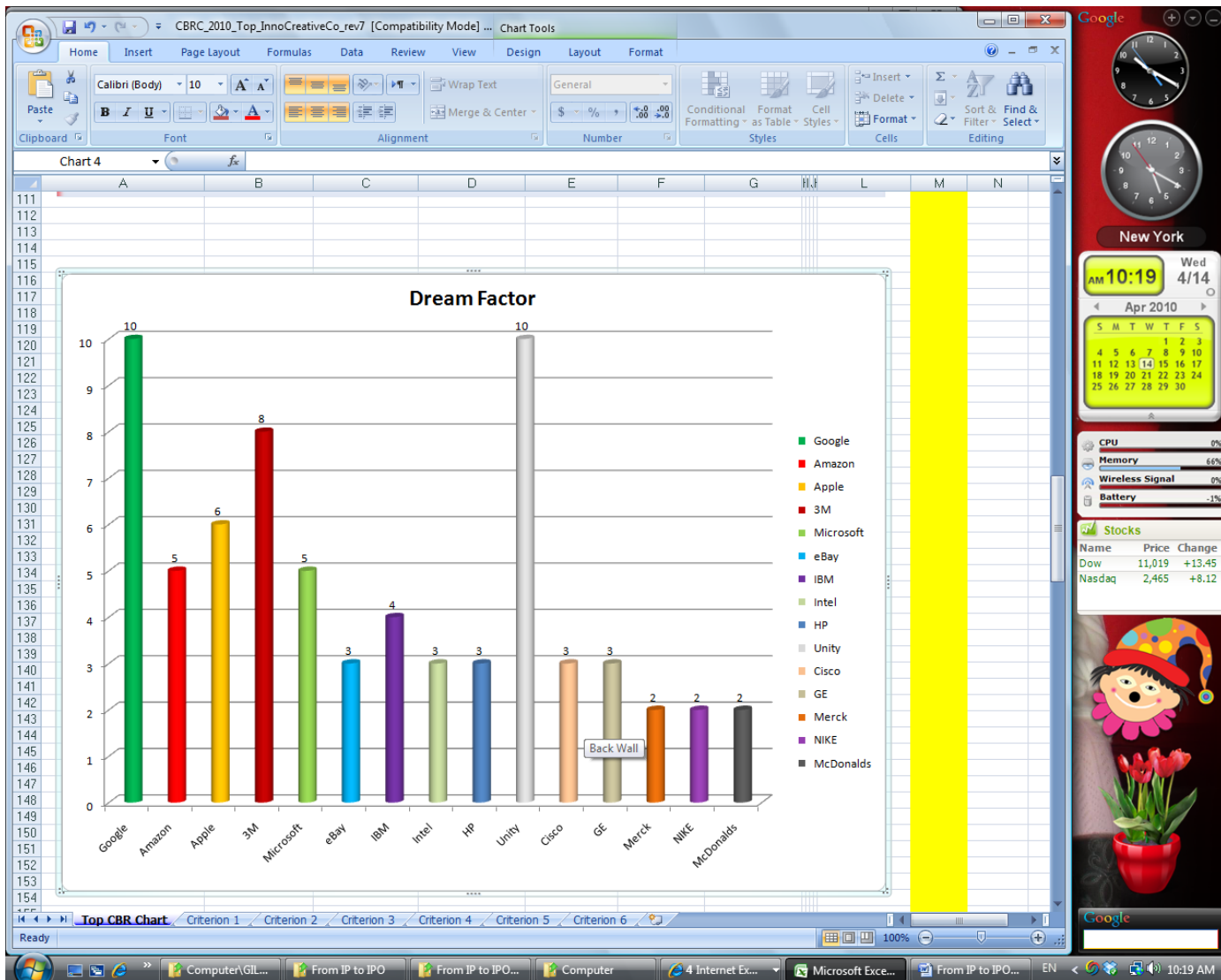


TABLE 3

The following URL (Wikipedia) <http://en.wikipedia.org/wiki/Google> has a great summary of the History and facts about Google. Here is a quote that relates to the Innovation Time Off:

“As a motivation technique (usually called Innovation Time Off), all Google engineers are encouraged to spend 20% of their work time (one day per week) on projects that interest them. Some of Google's newer services, such as [Gmail](#), [Google News](#), [Orkut](#), and [AdSense](#) originated from these independent endeavors.^[137] In a talk at [Stanford University](#), [Marissa Mayer](#), Google's Vice President of Search Products and User Experience, stated that her analysis showed that 50% of the new product launches originated from the 20% time.^[138]”


In addition to Google and 3M, other companies are starting to adopt this innovation technique. In particular Unity Technologies (www.unity3d.com) has adopted a similar approach.

The ranking of Google was based partially on the following Financial Summary:

Income or Revenue	FY 2007	FY 2008	FY 2009
(\$ Billions)	16.593	21.795	23.65
Net Income	4.203	4.226	6.52
(\$ Billions)			

The information in the above table were collected from SEC filings and/or Audited Financials.

The following information is also available from the Wikipedia URL indicated above.

	
Type	Public (NASDAQ: GOOG , FWB: GGQ1)
Industry	Internet , Computer software
Founded	Menlo Park, California (September 4, 1998) ^[1]
Founder(s)	Sergey M. Brin Lawrence E. Page
Headquarters	Mountain View, California , United States
Area served	Worldwide
Key people	Eric E. Schmidt (Chairman & CEO) Sergey M. Brin (Technology President) Lawrence E. Page (Products President)
Products	See list of Google products .
Revenue	▲ US\$23.651 billion (2009) ^{[2][3]}
Operating income	▲ US\$8.312 billion (2009) ^{[2][3]}
Profit	▲ US\$6.520 billion (2009) ^{[2][3]}
Total assets	▲ US\$40.497 billion (2009) ^{[2][3]}
Total equity	▲ US\$36.004 billion (2009) ^[3]
Employees	19,835 (2009) ^[2]
Subsidiaries	YouTube , DoubleClick ,

	GrandCentral , Picnik
Website	Google.com

