A New Era of Innovation? How to Manage IP in Open Innovation*

By LL.M. Patrik Andersson

This article deals with Open Innovation (OI), and will discuss legal issues and organisational problems that could occur when a company is implementing an OI approach to their innovative process. Additionally, it deals with how companies have developed their business models within the OI framework.

The concept of OI is not new. Companies have always, to some extent, tried to learn from others and implement good ideas. But mainly thanks to modern society, we are able to connect with a larger audience faster, which inevitably results in an easier way to find the right competence (experts) for a problem that otherwise might have been hard to solve.

In the following the reader will be given insights of how a few successful companies today try to implement an OI approach, and what the problems combined with this approach might be. My ambition with this article is to illustrate how different companies’ IP departments deal with their existing intellectual property rights (IPRs) and how they are combining or adopting them to OI.

An essential question is how open a company should be with its existing IP, not only in order to maximise the economic growth of the company, but also considering CSR and other social aspects. It is undisputed that technology can and has helped human progress i.e. in terms of curing diseases, and has helped the food industry to utilise sources in a better way. All this progress in technology has led us as humans towards a better well-being. So, if a company can develop its products faster and better this not only promotes its own success, but the market and society at large as well. Chidi Oguamanam wrote that:

“An IP system that is too strong undermines economic development and public objectives, which are (or ought to be) at the core of both IP and innovation systems in gen-

* The article is based on the author’s master thesis at the Stockholm University, Faculty of Law. The author would like to thank M.Sc. Lina Ahrnstein, Prof. Per-Jonas Nordell, LL.M. David Brissman, Ph.D. Monirul Azam and Sven Ekert for all their help, contributions of great ideas, proof reading and editing this article before publishing. An additional thanks goes out to Robin Berzelius and Ulf Willquist at Awapatent for sharing their extensive experience within the field of IP.
eral. By contrast, an unfettered openness could chill the entrepreneurial investment that is necessary to convert invention into innovation for the common good of society.1

The most prominent problem, when discussing OI is that all IPRs are mainly designed to give the holder of the right a benefit in terms of an exclusive right to use his or her ideas or innovations behind the IPR. To be considered as an open IPR system, other people have to be able to gain access to it, participate, collaborate and in the best of worlds even be encouraged into contributing to its improvements.

1. Introduction
OI, sometimes also called crowdsourcing or co-creation is about bringing external ideas or input to an innovation process. It would be nearly impossible to write an article about OI without mentioning Henry Chesbrough, founder and promoter of the term OI and writer of “Open Innovation: The New Imperative for Creating and Profiting from Technology” in which he wrote that:

“Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology. Open innovation combines internal and external ideas into architectures and systems whose requirements are defined by a business model. The business model utilizes both external and internal ideas to create value.”2

With this being said, Chesbrough believes that since the knowledge in today’s society is widely distributed, mainly due to the Internet, a company cannot rely on its own assets and innovations sprung from company in-house research alone, but should also invite outside sources to contribute. This could for instance be accomplished by acquiring inventions or IP from other parties or license in or out IPR when advancing in the innovative process. In recent time many companies have discovered the benefits of OI.

Even though this article will deal mainly with OI in general and patents in specific, open sourcing existed before Chesbrough implemented the term and “branded” the concept of OI. Moreover, it also serves to give a good idea of what OI is all about; certain aspects of open source will be dealt within the frame of this article.

1.1 Open source in short. In open source someone starts with developing a code, software or program for a specific purpose and thereafter, usually online, lets anyone who wants to contribute to make the code better do so. A brilliant ex-

2 Henry Chesbrough, Open Innovation –The new imperative for creating and profiting from technology, 2005, p. XXIV.
ample of this is Linux created by the Finn Linus Torvalds, who is sometimes referred to as the “founder of the Open Source crusade”.3

Linux is based on the famous so called GNU License, created by Richard Stallman. It was a response to Microsoft’s monopoly and closed coding. Today many companies are contributing with resources and money to help developing this software. Android, a software that can be found in many smartphones today, is actually developed from a Linux-core and is therefore an excellent example of how a company can gain from OI (open source). This article will examine both how a company and society at large could draw benefits from OI.

1.2 Outline. Since the notion of OI can be applied to various industries and in most innovative processes, this article focuses on how OI is used in five different industries. In particular how the IP departments in these industries have adopted this process of sharing what they already know or own with implementing external ideas.

In addition, to summon some of what has already been written in the academic literature, and to be able to show the reader of this article, from a practitioner’s point of view, how to think and what kind of pros and cons he or she will have to deal with when deciding over opening the companies IP, I have performed interviews. I have been using a Qualitative Research Method. With this method, most often semi-structured interviews are used, which means that they are based on an area of interest rather than detailed questions.4 I chose to follow this method as the aim was to get the IPR managers’ view on their reality. In this way, the discussion could be conducted in a more natural way and the interviewee may point out the direction of the conversation, which leads to the core problems and hopefully solutions to their specific areas of expertise. I have chosen to conduct interviews with companies that have a “reputation” of being progressive when it comes to dealing with open IPRs. The selection can be considered limited, but even a few well-conducted interviews can according to Kvale be worth more than several bad ones.5

2. Open Innovation

Even if OI most probably causes the strictly inventing part of any company more good than a “closed” or “semi-closed” one would do, it is necessary to keep in mind that not everyone neither wants nor should “give away” all of their IPR just for the sake of maximising the improvement of their innovation. Companies of course also want to profit from what they already got and make sure that the competition does not get a free ride on their efforts. One way of gaining access to external ideas and third-party knowledge is to use the company’s IPR as an asset, which could be traded. The IPR could more tradition-

5 Kvale, Steinar, Interviews: An introduction to Qualitative Research Interviewing, 1996.
ally be used to build new companies, create exclusive rights and generate income from licenses.6

To make the change from having the company’s IP “closed” and switch, to an OI system this demands for significant organisational changes as well as a re-definition of the tasks inside the organisation.7 Still many companies, already prominent within in their field, and especially with research and development (R&D), decide to make these organisational changes. I will try to illustrate what some companies within the field of pharmaceutical, computer software, online media, oil and gas, and agriculture. Industries have done, and show what steps they have taken to open up their IPRs and innovations and try to see what they have gained from it. Of course some steps are smaller than others, where for example companies like Philips8 have abandoned cross-license agreements for technical exchange in benefit to separate agreements (more specific) or the more modern approach of setting up a collaborative project, which works in an OI environment. In the Philips case the more modern approach is specifically used when the area of innovation concerns a wider field or more long-term goals.

2.1 Pharmaceutical industry. Analysts agree upon that the pharmaceutical sector is the most successful one regarding the application of patents.9 When talking about IPR and OI within pharmaceuticals it basically comes down to patents. The patent protection runs for a period of 20 years – with an possible addition if the company files and receives the special exception granted for chemical patents – in both Europe and the US and it takes about 7–10 years to get the drug into the market after first filling for protection. This means that the companies usually end up with an exclusive right to use their drug for about 10–13 years before the market is flooded with generic drugs. Chesbrough states that the pharmaceutical companies traditional innovation model is the “blockbuster” model.10 A blockbuster business model means that if a movie studio for instance produces 10 movies one year, 9 of these will lose money but the tenth will make so much money that it will make up for the other movies’ loses. In pharmaceutical we can see that as most of the research does not lead to any commercial success, some are very successful and raise over $1 billion yearly for its manufacturer. Chesbrough goes on saying that most of the “low hanging fruit has been picked” which will lead to that producers must work harder to even accomplish the same results as they did before. There is also a risk with this strategy; he goes on saying, that the pharmaceutical companies neglect the medical needs of smaller patient populations.

7 Oliver Alexy, Joachim Henkel, & Martin Wällin From closed to open: Job role changes, individual predispositions, and the adoption of commercial open source software development. Research Policy, p. 42.
2.1.1 AstraZeneca. I interviewed Dr. Craig D. Wegner, Ph.D., Executive Director, Translational Science, Emerging Innovations Unit, Scientific Partnering & Alliances at AstraZeneca Pharmaceuticals LP and got their view on opening IPR: AstraZeneca do not routinely “open” their IPRs, but rather prefer to share information. Only sufficient information that enables an investigator to create a ‘concept’ collaboration proposal is shared, being careful not to disclose information that would diminish their competitive position. IPRs (typical on a compound) is only “open” when they are considering an out-license. Such out-license of compound IPR can come with license fee, later milestones and/or royalties, and/or, an option for a buy-back.

When deciding which IP to open and estimating the advantages and disadvantages that might occur when opening, AstraZeneca has a policy to license out IP only when it no longer fits to their strategy or the risk or reward is not competitive with other projects they prefer to invest in with their R&D budget (AstraZeneca has one of the biggest R&D budgets in Biopharma). In terms of benefits directly sprung out of opening some of their IP assets, Wegner points out:

a. upfront payments on granting a license to the IPR,

b. downstream milestones and/or royalties, and/or

c. buyback option when the risk/reward ratio has been improved.

For open collaborations, IPRs is retained by AstraZeneca, but newly generated IPRs are owned typically by the “inventor” which is often their collaborator. In these open collaboration arrangements, AstraZeneca’s typical agreements provide them with an option to license the invention exclusively or non-exclusively, commonly at fair market value.

When talking about what Wegner sees as the biggest problem with open IP he says that for licensing IPR, the biggest challenge is that it takes effort to negotiate and transfer the materials – so even some potential valuable assets “sit on our shelves” because it costs more time, money, and opportunity cost (time and money that could be used to do other more valuable tasks) than to out license them. For open collaborations, he says that the challenge is to make sure the contractual agreement covering the collaboration covers the IPR invented via the collaboration, that the inventions are adequately available to each party after the collaboration ends, and that each party is appropriately compensated in the circumstance of future commercial gains from the invention. This way – truly open, without constraints collaboration in terms of sharing of information, findings and brainstorming can occur. To deal with these problems Wegner and AstraZeneca is trying to negotiate contracts that are fair to both parties and consistent from partner to partner.

2.1.2 Computer software. There are two kinds of software: open software and proprietary software. Proprietary software has an owner, which could be an individual or a company. In most cases it comes with major restrictions in terms of
using it, and its source code is usually kept a secret. The license should be looked at as a form of contract and trade secret protection at the same time. Backwards engineering the source code could thereby constitute contract violation as well as misappropriation of trade secrets, and the software licenses can co-exist with other forms of intellectual property. So protecting proprietary rights in computer software could be done by using software license agreements, copyright and/or in combination with software patents (cf. supra). In recent years it has become harder to be granted a software patent in Europe since the legal ground and practice has been changed, stating that software (programs for computers) itself per default cannot be patentable. \(^{11}\) “EPO case law says that controlling or carrying out a technical process is not excluded from patentability, irrespective of whether it is implemented by hardware or by software”. \(^ {12}\) If the software brings a technical solution to a problem, then, and only then it can be considered to be granted with patent protection in the EU. If not meeting the recent increased and higher standards set, a manufacturer of proprietary software must rely on the other IPRs mentioned above, copyright or license agreements.

But why would anyone spend time and effort on improving or developing open software (usually without getting paid)? It is possible to identify two specific incentives for software programmers:

- the career concern incentive,
- the ego-gratification incentive

The first category does it because of future job offers and bears in mind the possibility to get shares in commercial Open Source-based companies while the second incentive "originates in a desire to gain recognition from the group". \(^ {13}\)

2.1.3 Linux. As most people are aware of and as mentioned earlier above, Linus Torvalds (Linux) changed the game when he released his operating system. Before Linux it was pretty much a two party war for market dominance between Apple (Mac) and IBM (Windows). As of November 2013, 96.4 per cent of the world’s 500 top super computers run on Linux. Also the mobile software system Android runs on a modified Linux core. Android itself is an open source software. This gives the user more options in terms of modifying the software (with enough skills to do so). An un-academic conclusion is that this is actually why one can see engineering students more often than law students for example using Android phones instead of iPhone (which is far from Open Source). Torvalds once said: "Think of Richard Stallman as the great philosopher and think of me as the engineer". \(^ {14}\)

\(^ {11}\) European Patent Convention (EPC), Article 52.
\(^ {13}\) Frantzeska Papadopoulou, Opening Pandora’s Box: Exploring Flexibilities and Alternatives for Protecting Traditional Knowledge and Genetic Resources under the Intellectual Property Framework, 2014, p. 307.
2.1.4 Red Hat. Maybe an even more successful and better example than Android of how a company could commercialize on OI (Linux) is the company Red Hat. It started to print and sell the Linux operating system on a CD-ROM. I had the great privilege to discuss Red Hat with the prominent Swedish Economy Doctor, Ph.D. Thomas Rosenfall. He is one of the few in Sweden conducting research within the field of OI and has published the dissertation “Open Source Business Models”, which deals with the “Red Hat case”. He said that what the company did was to provide a CD-ROM with the operating system and bundle it with documentation as a service; they were thereby not selling a license. What made Red Hat successful according to Rosenfall was that they were among the first ones providing this distribution, and thereby successfully created a trademark for themselves.

Red Hat was the first of all companies distributing Linux, being launched on Nasdaq after making an Initial Public Offering (IPO). It was at the time of the IPO, 11th of August 1999, achieving one of the biggest first-day gains in the history of Wall Street (today it is still considered to be the eight biggest of all time first-day gains).16

Rosenfall continues on stating that it is today nearly the only one in its kind remaining on the market. When looking back on the history of the company, he believes that the background to Red Hat’s success in the market is that they in 2003 started using subscription as a business model. Today it is the number one business model for all commercial Open Source software.

2.1.5 Cygnus Solutions. When open software was first developed and later introduced to the market this was not because of the eagerness of making money from the creators’ side. The idea was rather to break free from a monopoly that would not share its innovation. But, as shown above in the Red Hat case, there is money to be earned in the open software business. Michael Tiemann, co-founder of Cygnus Solutions had been an avid Linux user almost from the beginning when he started thinking on how he could create a company and a business plan for profiting on free software. He realised that there was no good customer support available for Linux users in relation to the main competitors (Microsoft and in some way Apple). He therefore started Cygnus, which was offering commercial support to open (free) software. Cygnus later merged with Red Hat in 1999.

2.1.6 Online Media and Entertainment industry – YouTube. The idea described above of open software has later been applied to more markets such as online media. Today most people take for granted the possibilities to share media online with one another. I am going to focus on what possibilities that lie in providing a platform for sharing and a solid business model for profiting from other

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contributions in terms of media. The most famous platform for video sharing online is YouTube, today owned by Google. Users can go online and see everything from a new trailer for a Disney movie to someone filming a goldfish. The business model and idea is quite simple.

Users are also given the option to provide content themselves, if they have the “necessary licenses, rights, consents, and permissions to publish”. When uploading media on YouTube you still retain your ownership but grant YouTube a royalty-free right to use it:

“For clarity, you retain all of your ownership rights in your Content. However, by submitting Content to YouTube, you hereby grant YouTube a worldwide, non-exclusive, royalty-free, sublicenseable and transferable license to use, reproduce, distribute, prepare derivative works of display”.

To sum it up: YouTube provides a platform where a submitter of material by contract grants YouTube a royalty free license to use the submitted material. To simplify, YouTube is showing other people’s media online. The company creates revenue mainly by selling ads on the website. Estimates done have showed that YouTube’s advertising revenues did top $5.6 billion last year.

An obvious problem when dealing with huge amounts of uploaded material is that it is hard to control it all. Especially controlling who is the right (copyright) owner of the media. One could argue that in this case YouTube is to be considered strictly as an intermediary and therefor the question of secondary liability for copyright infringement emerges.

In the US legal system there are major uncertainties in regards to the liability for third-party copyright infringement in contrast to secondary liability trademark and patents infringement where there in the US exist codified liability rules. Instead of codifying the same for copyright the cases are decided on case-by-case basis by the court. So let us see how the court ruled in a recent case where YouTube had engaged in “brazen” and “massive” copyright infringement by allowing its users to upload and view hundreds of thousands of videos owned by Viacom without permission.

The case could serve as a good example of the real meaning and operation of the hosting safe harbor also known as the Digital Millennium Copyright Act (DMCA) and its ability to supply legal certainty for user-generated content platforms and other Web 2.0 service providers. The district court judge finally ruled in favor of YouTube on all disputed issues after that the judge concluded that YouTube had no actual knowledge of any specific instance of infringement.

17 YouTube was 2006 acquired by Google for 1,65 billion USD.
21 Digital Millennium Copyright Act, DMCA, Title II.
of Viacom’s works, and could therefore not have “willfully blinded itself” from the infringement.23
In the EU where most membership countries have a civil law tradition, there is some codification to rely on in the shape of the limitations on an Internet Service Provider’s (ISP) liability, which could be found in the E-Commerce Directive, Articles 9 and 11, of the Enforcement Directive. It is stipulating that the Member States provide for the possibility of injunctions, including interlocutory injunctions, against “intermediaries whose services are used by a third party to infringe an intellectual property right”.24 After that the directive was adopted and came into effect, YouTube was litigated in Europe (more precise in, Spain, Italy, Germany and France). The litigations have actually resulted in different decisions nationally: YouTube lost in Germany and Italy, but won in Spain.25 In France26 the Viacom settled with YouTube. Instead of taking YouTube to court every time their IPR shows up on their website, several music and film companies have instead chosen to make a contract with YouTube stipulating that they are licensing their content to the company.27

2.1.7 Hit Record. The company Hit Record is taking the idea of providing a platform and restricting the users uploaded content by contract one step further. Hit Record produces feature movies, books, CDs, TV etc. Online contributors are submitting a lot of the material from which Hit Record produces its media content. Their three main principles are simple:

1. The “RECords” you upload are your creations.
2. You grant every user on hitRECORD.org the right to modify, adapt, and remix your RECords.
3. You grant hitRECORD.org the non-exclusive right to use and monetize your RECords (media). If they are successful in monetizing your RECords, they will share the Profits 50/50 with you.

Which equals:
1. The user retains his or her ownership rights,
2. You grant a license to the company to use the material submitted.
3. Profit sharing.

This business model means that the company is given the option to use any of the submitted material. This means that it is only liable to pay the contributor’s

half, but only if they are able to profit from it, otherwise they do not have to pay a dime to the contributor. Since there is great risk involved when producing media (read above about the Blockbuster model) this is a new way of managing that risk and minimising it for the producer.

2.1.8 Shell. Shell is considered to be one of the biggest energy and chemical group in the world.\(^{28}\) It founded their first OI center in Boston, USA in mid 2012. To be able to gain from the progressive research taking part all over the world and especially in Asia, Shell has opened several more OI centers, the most recent in China.

Shell has also launched the “Game Changer” program, which consists of 12 technical and scientific experts. The program helps anyone (inside or outside the Shell organisation) with an idea to develop it further. Successful projects can be turned into an R&D program, a commercial license, or a new venture.

Jaco Folk joined Shell in 2012 to help Shells Innovation department to make the transition towards a more OI approach and he was kind to answer my questionnaire, which I got a chance to discuss further with Willem Peutz at Shell Global Solutions International, OI department.

Shell has always been open to its IPRs when it comes to in- or out licensing and it has also set up Shell Technology Ventures funds to deal specifically and separately with spinning in and out of technologies:

“Shell Technology Ventures Fund 1 B.V. (the Fund) is an investment fund focused on accelerating the development and deployment of new technologies across the energy sector. Its primary focus is on the upstream oil and gas sector, but also selectively invests in the downstream, renewable energy and by-product recycling technologies.”\(^{29}\)

When it comes to deciding what IP to open and estimating the advantages and disadvantages for it, Folk states that the IP they do not use is open to license out, or could be transferred to startups using STV.\(^{30}\) They have also developed a “shopping list” of technologies that they want to obtain from the outside world.

When it comes to benefits directly sprung from opening their IP, he points out that they can accomplish innovation “faster, better, cheaper” using OI. The biggest problem with open IP is negotiating the terms with another party; it slows down the process. There is in addition also a risk of contamination of their own IP when opening it.


\(^{30}\) Shell Technology Ventures invests in companies to speed up the development & deployment of new technologies which complement their business.
To deal with this problem Shell uses framework agreements with universities and major suppliers but they also use OI intermediaries, who can do anonymous searches or can interpret the knowledge as intermediaries.

2.1.9 AkzoNobel. AkzoNobel is a company with tens of thousands of employees and is based in more than 80 countries. The company is a producer of chemicals, mainly paints and coatings. In order to make connections with creative individuals, academia and companies they have made efforts to connect with them under the parole: "None of us is as smart as all of us." The following is mainly based upon an interview with Andrew Burgess, Chief Scientist and Open Innovation Director. Since AkzoNobel is a multi-business and multi-national company, the first step is to “make sure they know what they know” (investigating what knowledge that could be found inside AkzoNobel). You can view it as peeling back the layers of an onion.

![Diagram: Layered circles from Global to Network] This means that AkzoNobel firstly looks inside the company after the asked for competence. In order to get from the Business Unit (BU) out to the wider organization, they established Communities of Practice that allow experts across the entire organization to exchange ideas, ask each other questions and share best practice. AkzoNobel have 4-5000 employees now engaged in CoPs. “A CoP is a group of people interacting and working together across the entire AkzoNobel organization, having a common interest in sharing knowledge and know-how about a topic that is important to them individually and strategically relevant to the company as a whole”. This has according to Dr. Burgess

32 https://www.akzonobel.com/international/innovate/core_s_and_t_expertise/cops/ read 2014-10-01.
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proven to be a very successful first step. It also means that external links made by one business in a certain country can be shared with another business in a different country, which starts to broaden the global external network. In addition to this, they have an Open Innovation (OI) webpage, (Dr. Burgess believes that this needs to be easier to find though). The webpage allows people to submit their ideas with respect to their listed needs. This works reasonably well, but is something Dr. Burgess is aiming to improve.

Deciding when sourcing outside the company is reasonably straightforward. If the BU cannot solve the problem themselves; they first look within the wider AkzoNobel community. If this still fails to solve a problem, AkzoNobel turns to one of the following sources:

- suppliers,
- universities and
- 3rd party technology brokers.

One of their objectives going forward is to try to get more from suppliers. However, the downside is that it is usually difficult to obtain any exclusiveness. What the suppliers develop for AkzoNobel, they also offer to their competitors in order to achieve volumes. This is an issue AkzoNobel is still trying to solve. AkzoNobel therefore have extensive links with universities and will often turn to them. If they are unable to solve the problem, they have on occasions turn to 3rd party providers. He believes that 3rd party technology brokers can provide a useful service, especially to smaller companies without a larger network of their own. In AkzoNobel’s case, some limited success has been achieved and this route remains an option. Dr. Burgess thinks they might be more useful for small companies that do not have the kind of extensive network that Akzonobel has.

The director finally thinks that the general principle is that, while trying to secure the best IP ownership you can for your company, you must properly recognise the IP rights due to the technology provider.

2.1.10 Agriculture. When discussing agriculture and innovation it usually refers to breeding of new crops and plants. These breeders have historically mainly been family-based enterprises, research institutions, or medium-level industrial actors.33

Usually innovation regarding plant genetic resources can and are protected by patents. However, there is also a special “quasi-IP form” available for protecting research findings in relation to plant breeding, namely Plant Breeders Rights (PBR). PBR is also known under the name Plant Variety Rights (PVR) and therefore serves the same function. Few if any could deny a company’s value of its IPR, and that IPR serves as an incentive for knowledge and innovation. But Oguamanam believes, that there is an emerging potential for the two innovation IPR-models of open and closed IPR to co-exist within agricul-

33 Chidi Oguamanam, Open Innovation in plant genetic resources for food and agriculture 2014, p. 23.
He describes it as: “IP is not inherently allergic to the promotion of social innovation and the accommodation of its social interest considerations.” I interpret that as a kind of philanthropic innovation, a way to create value from IPR and at the same time considering social interests. This kind of dualistic philanthropic-/business minded thinking, is one of the objectives, expressed and stipulated in the articles 7 and 8 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS agreement). However, the articles themselves can be considered somewhat vague and therefore can the “regional and national implementation initiatives present considerable interest”. Therefore the agreements formulation leaves plenty of room left for each of the contracting parties own interpretation of the articles.

3. Analysis

An article in the magazine Forbes 2012 by Adam Hartung (Harvard MBA) seeks to pin down what he calls as the faulty logic between R&D spending and Innovation. He argues that neither Apple, Amazon, Facebook nor Genentech are among the top spenders when it comes to R&D, even though few could deny that these companies are widely considered to be highly inventive.

On the other end we find the pharmaceutical companies Johnson & Johnson, Sanofi, GlaxoSmithKline and AstraZeneca, which are all among the top spenders in terms of R&D, spending a cumulative $54B on R&D in total and which according to Hartung “have all failed to give the world any incredible new drugs, all have profit struggles”.36

Hartung draws parallels from successful innovation companies and concludes, that these do not spend more money year after year on old businesses. The problem according to Hartung is that these widely spending pharmaceutical companies are not seeking innovation, but instead, are trying to defend and extend the historical business. Hartung’s solution to the false equation (R&D spending’s equal innovation) is:

− cut the budget in half (at least,)
− invest the remaining budget somewhere very different.
− instead of looking deeper, look wider – broader.
− investigate alternative solutions, rather than more of the same.37

The only company that has been successful in getting a “reasonable” value in terms of spending money on R&D and also being regarded as an Innovative company (getting a bang for their buck in terms of gaining innovations and a

34 Ibid. p. 13.
read 2014-10-01.
37 Ibid.
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bigger IPR portfolio) is actually Samsung, that spent 10.4 billion USD on R&D. With this extent on money spent on R&D, the company earned third place on the list of R&D spending among publicly traded companies worldwide, as well as second place among the Global Innovation 1000 survey respondents to name the companies they thought were the world’s most innovative. The study was carried out by Booz & Company.38

Some of the companies covered in this article mainly focus on providing the platform for great ideas for someone else’s IP-protected content. So one way for the future can be to establish a company as the “good intermediary” with a strong brand that makes others interested in lending out their IPRs to use and display it to others. From the examples given above, we can see that companies with well-established trademarks are looking for input and great ideas. It is often hard for someone, who might have a great idea or innovation, but lacks in experience in developing the idea by commercialising it and in the end actually profit from it. As this article shows, People are obviously ready to share great ideas in many cases, sometimes even for free, and the companies then get the possibility to decide whether the submitted idea is worth buying, license or collaborate with.

A lot of great ideas are available out there. A great business model can consist of being a provider of a platform, an intermediary to collect the ideas and profit from them. When it comes to gathering internal ideas from a company’s view, the companies in many countries (i.e. Sweden39) actually in most cases already lawfully own the IPRs of its employee’s creations per default.

One problem when dealing with OI and patents, especially when utilising external ideas and later trying to capitalise them by applying for patent protection is, that the idea or innovation might not fulfill the requirement of being novel. This is something that every IPR manager must take into consideration when deciding upon “how open” the process should or can be. Maybe there is a stronger need for solving the problem per se than it is to have a monopoly on using the invention. If that is the case, full openness won’t be a problem, but in a lot of cases an option for patentability could be a “must-have” in order to monetise from the innovation and cover the cost of investments in R&D. If the need for solving the problem itself, is bigger than solving the problem and at the same time having monopoly using it, the IPR manager should consider sharing costs by creating joint R&D departments or fund university research dedicated to the specific field of study within that area. This offers possibilities to make it more cost effective.

Trade secret law helps companies to protect their business information from being misappropriately used by others. The main requirements for obtaining trade secret protection is that the information has to have some value and that the owner keeps the info secret and/or at least sees to it that reasonable secrecy

39 Lag (1949:345) om rätten till arbetstagares uppfinningar.
Trade secrets are by nature something that the company or the IPR manager has to make sure does not reach out to someone un-authorised, because otherwise they risk losing the trade secret protection. The company needs to keep their secrets. The safest answer to this question, from a company point of view, should be to open the IP when it is considered totally obsolete for the company, which would lead to minimise the risk for potential income loss and that any rewards therefore is to be considered a pure bonus.

But every company considering using this strategy should also take into consideration, that the competition that might gain access to IPR after being opened might benefit from it and, thereby, be more successful and flowingly take a bigger market share, hurting the first company’s share.

4. Conclusion
Today most IPR directors’ main perspective seems to be to protect what they already got instead of asking what they could get or accomplish. What the IPR directors’ say (see above) is basically that they might be prepared to share something that they do not value anymore. Instead, I think that the company should be braver, like those ready to adopt the OI concept and raise the bar and ask themselves: What do we have and what do we want to accomplish in terms of innovation and how can we achieve that?

An Executive Director from AstraZeneca said, that he could consider opening up their IP after a decision not to spend more of their R&D budget on the invention. This statement is based upon the argument that their own R&D is probably the best or at least most profitable. But today, with sinking revenues for pharmaceutical companies and astronomical costs for in-house R&D, I think it may be time for a change.

We now live in a world where most people have the ability to go online anywhere at any point of time. Since the Internet is a game changer in the past decades, all companies should and must therefore reconsider its strategy if they want to remain competitive. As mentioned earlier Chesbrough cites, that “more and more R&D spending’s by pharmaceutical companies results in fewer and fewer drugs.” So one has to spend more to get less with the conventional method of innovation. I also suggest being more proactive instead of just adopting the approach of an “ad hoc basis, depending on circumstances, interest and opportunity”. By that I mean, that the companies should go out and actively find partners or people that can help the companies to accomplish goals instead of relying on their own R&D departments. Their strategies are based on a more passive model. If they want to maximise their innovation progress, the compa-

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43 Interview with Loek Penders, Director of Intellectual Property, AKZO NOBEL.
A New Era of Innovation? How to Manage IP in Open Innovation

Companies might need to be more aggressive and see if they could collaborate with someone who has a competitive advantage.

Instead of focusing on too many resources on protecting what a company already has and market its products, the company should focus on being the best it can be in providing a good product or service for the consumer.

In this article I have shown that the companies examined are spending a lot of effort in terms of time and money on opening the innovative process in order to be able to draw benefit from the knowledge available outside of the company. They are willing to do so if they cannot accomplish the goals that have been set.

The need and interest of the companies to adopt this new way of innovation depends on a “simple” pro and con analysis, which every company should perform when considering implementing the ideas dealt with in this article. We should not forget that the IPR, that some of these companies manage, can represent a substantial and in most cases even the biggest asset on the company’s balance sheet.

New markets and business models have developed directly from OI and I have shown what can happen to companies that are not willing to examine the possibilities available from adopting this new approach and ways of making money from innovations, that were developed “for free” by a large mass that were summoned online. The need of moving people physically to a workstation has decreased as the online possibilities for sharing data has increased.

In conclusion, it is impossible to draw a general assumption that there are some general needs or models available for a whole industry. Rather, it is for the IPRs or Innovation managers to determine in each case and scenario what strategies to follow. This demonstrates, that if you find yourself in the “farthest layer of the onion” and have thereby emptied out all other possible ways of accomplishing the project goal, an Open Innovation approach provides a valid option.