Are Patents Now Stifling Innovation?

Barely a day seems to pass without some headline referring to ongoing and new patent disputes in the smartphone arena. Motorola, Nokia, HTC, Apple, Google, Research In Motion (Blackberry), Samsung and others are all involved in one or more patent lawsuits relating to their smartphones.

Google has recently agreed to purchase Motorola Mobility. The prime motivation behind this purchase is said to be the acquisition of Motorola Mobility's patents.

Earlier this year a consortium including Apple, Microsoft and Research In Motion acquired the patent portfolio of Nortel Networks at auction. The 8,800 mobile phone patents owned by Interdigital are also up for sale.

Patents are intended to encourage innovation. They are granted for inventions that are new and that are not obvious developments of previously known technology, and reward the inventor with a monopoly to prevent others from using the patented invention for a period of time (typically up to 20 years).

The premise behind patents is that by providing the monopoly that a patent gives, inventors will be able to reap the reward of their efforts, thereby providing not only an incentive to invent in the first place, but also to invest the sums necessary to produce and market the invention once it is developed, and to share the details of the invention publicly, thereby furthering the dissemination of knowledge.

Many industries will argue that the patent system is necessary for them to be able to afford the investment required to progress their products and services. For example, the pharmaceutical industry will say that without patents, they would be unable to make the significant investments needed to develop new drugs.

Even in the smartphone arena, significant research and development and commercialisation investment can be required, for example to design and install the mobile phone networks in the first place and to continue to develop them to keep pace with consumers' demands.

But has this now gone too far the other way? Does the sheer number of patents that have been filed and the potential cost of infringing them mean that patents are now in fact stifling, rather than encouraging, innovation?

A simple argument would be to say that because there are so many patents and it seems that large companies are at present prepared to take action over their patents, then that can only mean that innovation is being hindered and there could be too much risk associated with trying to be innovative. However, is there another way of looking at this?

Many of the companies in the current smartphone disputes have been involved in designing and developing the mobile phone networks and systems that the smartphones rely on for many years and will have legitimately filed patents for the inventions that they have made during that process.
Should these companies that have invested time and money in designing and developing the mobile phone networks and systems and establishing the smartphone industry be expected to allow their competitors access to their inventions that they made during that process for nothing? Or should they be able to use their patents to protect the value of their innovations?

Could the current smartphone patent disputes therefore be seen as demonstrating the effectiveness of the patent system and as encouraging, rather than stifling, innovation? Do they in fact indicate that large companies in these exciting technology sectors value innovations and the patents that protect them?

Technology start-ups should therefore be encouraged, rather than discouraged, to innovate, as competition in the smartphone market is being driven by and based on innovations and the patents that protect them.

It is also necessary to look behind the headlines.

For example, although statements that large companies have been found to infringe one or more patents may make good headlines, it can often be the case that the commercial reality is not so significant as the headline might suggest. In many cases the findings of patent infringement relate to product lines that may be relatively minor and have limited commercial significance, such as models of phones containing one particular version of a microprocessor or some particular feature that may not be present in all of the companies’ products.

The patents in question may also, for example, relate to implementation features of the phone or operating system, that while potentially beneficial in some respects are not essential to the operations of the phone or operating system and so can be omitted or redesigned to avoid the patents.

Indeed, a further purpose of the patent system is to encourage innovation by forcing companies and individuals to have to invent or design-around existing patents. This is another reason why innovation should be encouraged, not stifled, by the current patent situation, as it is only by innovating new products and features that avoid existing patents, rather than copying existing ideas that may be protected by patents, that patent disputes can be avoided.

Of course, there are some patents that cannot be avoided, such as so-called "essential" patents that are needed, for example, in order to be able to conform to the relevant mobile phone standards. In this case there is no opportunity to omit or design-around the patented features.

However, the standards setting bodies account for this by making it a requirement that any patents that are essential in a given technological field, for example to conform to a mobile phone standard, will be licensed on fair and reasonable terms.

The effect of this is two-fold. Firstly, it means that patents that cannot be avoided cannot be used to exclude new companies from developing and producing products in competition with the patent holders.
Secondly, it encourages the development of open standards and for technologically active companies to participate in and contribute their innovations to the standardisation process. This is because those companies know that if their innovations are used in the standards, they should not only gain some financial compensation for that where their patents are being used, but also gain access to other companies’ patents that are relevant to the standards.

The effect of this therefore is to encourage collaboration to develop open standards and to include innovations in those standards, rather than companies each seeking to develop their own proprietary and secret systems. This then has the benefit that consumers do not have to be tied to a particular company’s products and systems.

Open standards and the patent licensing provisions that go with them thus mean that new companies, such as technology start-ups, are able to enter the marketplace and compete with the existing providers. Again, it could be argued that this should therefore encourage innovation among technology start-ups for example, because it is only by distinguishing oneself through innovation that one can compete with the existing providers.

Something else that should not be overlooked is that it can be extremely beneficial for technology start-ups, for example, to hold patents of their own. Such patents can be used for defensive purposes in the event of a patent dispute, as well as to prevent others from using the innovation that the patent protects. However, patents are only available for new inventions, and so the only way to obtain patents yourself (other than by purchasing them) is to innovate. Thus a further incentive to technology start-ups to innovate is the prospect that such innovation will lead to those companies holding their own patents.

It may be said that so-called "patent trolls" or non-practising entities, which hold patents but do not themselves innovate nor produce products, do by their activities hinder the realisation of innovative products. However, again it may be debated whether in fact the existence of such patent trolls does actually discourage innovation.

Another way of looking at this would be to say that patent trolls offer a further potential route for realising the value of innovations, in that they will be potential purchasers of patents that protect significant innovations. Thus patent trolls potentially offer technology start-ups another way to obtain value from their innovations and the patents that go with them.

So where does this leave us? Does the current number of patents and patent disputes mean that innovation could now be being stifled?

It should not. Not innovating and simply doing what has been done before is more, not less, likely to lead to patent issues. Innovating and developing new products is a way to avoid these issues. If one innovates, one can obtain one’s own patents which can then be used for both defensive and offensive purposes.

The current smartphone patent disputes suggest that innovation and the patents that go with that are critical in today’s smartphone arena at least. That should only encourage technology start-ups and other companies to innovate and acquire their own patents. The large companies in this arena, and consequently investors in technology companies, see that more than ever the value of companies and their position relative to their competitors is determined by their ability to innovate and by the patents that they can correspondingly generate and hold.

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