

## Ever increasing circles: Thomson Scientific 2008 Patent Focus Report

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*Worldwide patent activities are at an all time high and still increasing, but are the major patent authorities coping? This report reviews key statistics and developments from 2007 for patents and patent owners in China, Europe, India, Japan and the United States.*

### CHINA

In December 2007, the State Intellectual Property Office (SIPO) – China's patent and trademark registry – reached a significant milestone when it received its four millionth patent application since the country's first patent law was implemented back in 1985. It took 15 years to get to the first million, but only one and a half years to get to the fourth million. However, given current application rates at SIPO, none of this can come as much of a surprise.

During 2007, SIPO received 694,153 patent applications covering three types of patent: invention, utility and design. This number may at first sight seem huge, but it does not tell the full story. The overwhelming number of applications – almost 450,000 – was for utility and design patents, which are not subject to substantive examination. Only invention patents receive full scrutiny and there were 245,161 of these submitted during 2007.

What is interesting to note, however, is the increasing proportion of invention patent applications coming from within China. In 2006, they represented just over 58 per cent of the total number of applications to SIPO, in 2007 this increased to almost 63 per cent. This increase was despite an increasing number of applications from abroad: 92,107 compared to 88,172 in 2006.

If you look at the numbers of granted patents in 2007: 53 per cent (36,003) went to foreign applicants, and 47 per cent (31,945) went to local entities. This may reflect the fact that until recently fewer Chinese companies had applied for invention patents. In future years, we will see those percentages reversing.

A move that may spur this growth in applications occurred at the end of December 2007 when the standing committee of the National People's Congress amended China's science and technology laws. The new rules allow scientists, institutions and universities to own any patents resulting from

their publicly-funded research, making China the latest of many countries to introduce a Bayh-Dole style IP regime.

In the courts, the long-running dispute over Pfizer's best-selling drug Viagra was finally settled. The Beijing People's High Court upheld a decision by the Beijing Intermediate Court to overturn a SIPO decision that disallowed the Viagra patent on the basis of insufficient disclosure. The Viagra dispute has been closely followed by companies across the world. It has been seen as a touchstone case – especially as it involved asking the Chinese courts to overrule a decision reached by an official state body.

While it may have surprised some that Pfizer succeeded in the litigation, a study of reported decisions in IP cases during 2007 suggested that if rights owners appear before the Chinese courts they have a 75 per cent chance of having the eventual decision go in their favour. This is the case whether the plaintiff is Chinese or from abroad. During 2006, there were more patent cases filed in China than in any other country, and while 98 per cent of these involved only Chinese companies, in the two per cent featuring a plaintiff from outside the country, the foreign entity ended up victorious 90 per cent of the time.

But not everyone is a winner. In September 2007, French company Schneider Electric was found to have violated five patents owned by Chint Group by the Intermediate People's Court in Wenzhou city - Chint's home town. The court ordered that Schneider stop the manufacture of a range of miniature circuit breakers and told it to pay close to USD 45 million to the Chinese company, based on profits Schneider had made from sales between 2004 and 2006. This was by far the biggest award ever made in a Chinese patent case. Schneider has stated that it will appeal.

## **EUROPE**

The European Patent Office (EPO) annual report for 2006, issued in June 2007, showed that both applications to the office, and grants made by it, were higher than in 2005, at 207,300 and 62,780 respectively. Although there was a five per cent rise in applications, the number of grants increased by 17.9 per cent. The United States, Germany and Japan continue to be the countries from where most applications come, and these three countries also get more grants than any others. One notable statistic is that the proportion of filings coming from the members of the European Patent Organization fell by a percentage point to 48.5 per cent. France and the Netherlands respectively follow Germany to make up the top three European countries from where applications are submitted.

The release of the 2006 report came just weeks before the retirement of Alain Pompidou as President of the EPO. He was succeeded on 1 July 2007 by Alison Brimelow, who will hold the post until 2010. Perhaps Pompidou's most lasting legacy will be the Scenarios For the Future project, a major initiative which involved looking at four possible ways in which the world will develop by 2020, and the implications that each will have for the EPO and the global patent system in general. The Scenarios project has been widely praised and has already begun to have an impact on policy at the EPO.

Since taking over at the EPO, Brimelow has indicated that her major priorities will be to deal with €2 billion-worth of liabilities that have emerged at the office since it adopted International Financial Reporting Standards, and what she describes as "the health of the patent system". Brimelow has said that she believes that an era in which it was relatively inexpensive to obtain a patent is coming to an end. A combination of too many abandoned applications and lowering renewal rates, with increasing backlogs and heightened concerns about quality, mean that those seeking patent protection may have to pay more to obtain it. One example suggested by Brimelow is for applicants to pay fees that reflect the actual cost of the EPO doing a search and issuing a preliminary opinion. Perhaps not coincidentally, the EPO announced significant fee increases at the end of 2007 for, among other things, renewals and applications containing more than 16 claims.

Also at the end of 2007, the EPC 2000 – the revised version of the European Patent Convention - came into force. Although it has little effect on substantive patent law in Europe, EPC 2000 will have a significant impact on procedure, including the elimination of the need for translations during the application stage, and the **elimination of the need to file drawings, claims and a description to obtain a filing date for a European patent (instead applicants can refer to previously submitted material in other countries)**. Of great significance is that communications between European patent attorneys and their clients will now be subject to privilege. Previously this had not been automatically the case and was instead a case for national jurisdiction.

Away from the EPO, the French Assembly sanctioned French ratification of the London Agreement on Translations in October 2007. This is now expected to come into force during mid 2008 and will mean that translation costs for patent owners will be far less onerous than before.

In fact, there were a number of indications during 2007 that patents were moving up the political agenda in Europe. While any hope for the creation of a single European patent jurisdiction seemed dead in the water at the end of 2006, there is now some momentum behind talks among EU member states to explore whether such an idea is feasible. While there is no imminent sign of a

breakthrough, both Slovenia and France – the two countries that hold the EU presidency during 2008 - have stated that maintaining progress is a priority. Some are predicting a major announcement may be made in the latter half of 2008.

## **INDIA**

India's patent regime changed on 1 January 2005, in compliance with Indian obligations as a member of the World Trade Organization. These amendments to the country's Patent Act allowed, for the first time, product patents to be registered. Since that time there has been a boom in the number of patent applications being submitted to the Indian Patent Office, so that during 2007 the number came close to 30,000 – a rise of over 30 per cent on the previous year's figure.

The patent office is struggling to cope as applications rise. Despite the increased workload, the four offices that handle examinations - Kolkata, Delhi, Mumbai and Chennai – have under 200 examiners in total. Recruitment has proved difficult and the attrition rate is high: the Mumbai Mirror reported in August 2007 that one-fifth of staff had left their posts in the previous two years. This is one of the reasons why applicants wait an average of two years before the examination process begins.

However, there does seem to have been a surge in the number of patents being granted, if recent reports are correct. During the Indian patent office's current fiscal year, which finishes at the end of March 2008, over 10,000 awards have so far been made. This figure is significantly higher than the 7,500 granted for the whole of 2006/07 and the 4,320 granted during 2004/05. Of course, it also begs the question of just how much scrutiny these patents have received given the low numbers of examiners currently employed.

Perhaps worrying for the Indian government is the fact that of the applications being submitted: about 80 per cent are from foreign entities, despite India's growing reputation as a centre for high-tech and life sciences innovation. Interestingly, the number of patent applications at the USPTO that have their roots in the sub-continent is growing significantly, as the investments that non-Indian companies have made in developing R&D facilities in the country begin to bear fruit.

Without question, the most high profile patent-related issue in India over the last couple of years has involved Glivec, the anti-cancer drug developed and manufactured by Swiss pharmaceutical company Novartis. At the beginning of 2006, following a pre-grant opposition proceeding, the Indian patent office rejected Novartis's application to patent Glivec under the provisions of Section 3 (d) of the Patent Act. This states that 'the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance, or the mere discovery of any new Property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant,'

is not patentable. Novartis claimed that in placing additional requirements for patentability beyond novelty, commercial applicability and non-obviousness, India's Patent Law is not TRIPs-compliant. Novartis took its case to the Madras High Court and, at the same time, asked the court to overturn the office's original decision.

The Indian government had also convened a committee, headed by the widely respected academic RA Mashelkar, to assess whether there were problems with the Patent Act as it related to pharmaceutical products. In December 2006, the committee reported back that certain provisions were not TRIPs-compliant. However, in February 2007, the report was withdrawn amid accusations of plagiarism.

In August 2007, the Madras High Court ruled that the Section 3 (d) was TRIPs-compatible. Although Novartis could have appealed this decision to the Indian Supreme Court, the company declined to do so. Prior to this judgment, the court had already referred Novartis's appeal against the original patent office decision to the newly created Intellectual Property Appellate Board. This has yet to issue a ruling in the case, although one of the individuals originally scheduled to sit on the panel – S Chandrasekharan – has been removed after Novartis objected on the grounds that he was the Controller of the patent office at the time the original rejection was made.

## **JAPAN**

The Japan Patent Office (JPO) annual report, issued in November 2007, showed that the number of patent applications in 2006 decreased by 4.3 per cent to 408,674. In its commentary on these figures, the JPO explained that one of the main reasons for the fall was the increasing emphasis that Japanese companies place on keeping their inventions confidential, to help prevent technology leakage.

The number of requests for examination at the JPO also showed a slight downward trend in 2006. In 2005, it was 396,933 (up 21 per cent on 2004), but this fell by four per cent to 382,116 in 2006. This is still a huge number, which can be explained by changes to Japanese patent law in 2001: these stated that requests for examination of applications submitted after October 1 that year had to be made within three years, rather than seven (under the previous law). This change left a number of active applications that were not covered by the new rules and which are now working their way through the system alongside all the applications submitted under the new three year time limit. The office expects the number of requests to peak within the next two years and then to drop.

The rise in the number of applications and examinations requests over the last few years has put staff at the JPO under increasing pressure, especially as the average number of claims in each patent

application has also increased to 9.5. The result is that first action pendency rates currently stand at 27 months and are expected to rise slightly for 2007 and 2008. After that time the aim is to achieve a significant cut in waiting times so that they fall to an average of 11 months by 2013. The JPO hopes to meet this ambitious target by tactics that include recruiting more examiners and outsourcing prior art searches.

The JPO now employs just over 1,560 patent examiners, having recruited almost 100 more – most of them on fixed term contracts – during 2006. This number, however, remains significantly lower than at the USPTO and EPO; according to the JPO's own calculations their patent examiners handle an average of 199 applications per year, compared to 78 for USPTO examiners and 45 for EPO examiners. JPO approval rates are declining: 129,071 patents were granted during 2006, representing 48.5 per cent of applications examined; in 2002, the rate stood at 51.9 per cent.

Worrying news for successful applicants looking for certainty post-grant is that, according to research released in April 2007, Japanese courts find against patentees in 90 per cent of the cases that they hear. Speaking at the 15<sup>th</sup> Fordham Conference on International Intellectual Property Law & Policy, Mr Eiji Katayama told delegates that he had found that of the 37 final trial decisions issued by the Tokyo and Osaka district courts during 2006, 33 had ended with a finding of non-infringement. Of these, two-thirds were decided on the basis of invalidity, while over 85 per cent of the invalidity findings related to the lack of an inventive step or obviousness. That said, other Japanese speakers at the conference pointed out that many of these cases concerned patents issued by the JPO when there was a much lower standard of patentability than there is now; while others observed that in cases going to appeal, patents are affirmed 80 per cent of the time.

## **UNITED STATES**

The US Patent and Trademark Office (USPTO) report on the fiscal year 2007 (which ended on 30 September 2007) was a document not lacking in optimism. Among the highlights it chronicled were that the office examined 362,227 patent applications between 1 October 2006 and the end of September 2007: the highest number ever. At 96.5 per cent, quality compliance equalled the previous year's achievements, which were themselves the best in 25 years; while patent examiner decisions were upheld by the patent appeals board 69 per cent of the time, compared to 51 per cent in 2005. Perhaps most noteworthy was that while in 2000, a record high of 72 per cent of all patent applications were granted by the office, that figure has now fallen to 51 per cent, which gives the USPTO comparable approval rates to both the JPO and the EPO.

Anyone reading the 2007 fiscal year report would be forgiven for thinking that while times were challenging everything in the USPTO's garden was basically rosy. However, the reality is that this is

not the case. In fact, the office's Director, Jon Dudas, is probably under as much pressure as any of his predecessors has ever been, with questions being asked about the quality of the patents being granted in the US, and about the relationship he and senior office officials have with the US patent bar.

While there has often been a simmering level of mistrust among US patent attorneys towards the USPTO – after all, its decisions have a material affect on livelihoods and reputations – the current situation is very rare, if not unprecedented. Practitioners have been up in arms about a series of actual and anticipated rules changes which, they claim, will make it much harder and more expensive to prosecute patents effectively and will leave them even more open to accusations of inequitable conduct. Two issues in particular have proved highly controversial: a new claims and continuations regime, and changes to information disclosure statement (IDS) rules. Although there was consultation on both, many attorneys claim that their concerns were completely ignored by a USPTO fixed on reducing backlogs and cutting pendency times, whatever the practical consequences. For its part, the USPTO states that it has a responsibility to do what is best for the US patent system, regardless of whether this may upset private practitioners and some applicants.

Matters came to a head at the end of October when, just one day before the new claims and continuations regime was due to come into force, a court in Virginia upheld a GlaxoSmithKline request to enjoin their introduction on the basis that the USPTO had exceeded its remit. The USPTO, however, is not backing down and will put its case in a full hearing which will take place this year. The IDS rules, meanwhile, are slated for introduction in early 2008.

The Supreme Court was also actively involved in patenting during 2007, issuing two major decisions and taking on a case that will enable it to explore the limits of patent exhaustion. The two cases in which judgment was made were:

- *MedImmune v Genentech* (January): broadly speaking the judgement makes it easier for licensees to challenge the validity of the patents they have licensed
- *KSR v Teleflex* (May): this will have a yet-to-be-fully-understood effect on the level of non-obviousness necessary in order for an invention to be granted a patent — although most commentators believe that the bar has been raised somewhat, no-one quite knows by how much.

The exhaustion case is *LG v Quanta* and is due to be decided by the middle of 2008.

Finally, the proposed Patent Reform Act continued to make its way through Congress. Although, a version of the legislation was approved by the House of Representatives, progress stalled in the Senate, so it is not yet certain that the first major rewriting of US patent legislation for over 50 years will actually occur. We will all know this time next year.

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