PATENTS

The author notes that a recent accelerated ruling by the European Patent Office revoking a patent on animal feed pellets demonstrates the importance of considering multiple jurisdictions for patent litigation.

EPO Revokes Patent in Record Time, Relying on Documents Disclosed in the UK

BY CHRISTOPHER STOTHERS

The Technical Board of Appeal of the European Patent Office recently revoked a patent on enzyme formulation for animal feed pellets in accelerated proceedings, bringing to an end in record time patent litigation in five jurisdictions. In doing so it relied on documents disclosed by the patentee in the proceedings in the United Kingdom and used by the opponent in the EPO with permission of the High Court of England and Wales. *Danisco v. Novozymes* [2012] EWHC 696 (Pat) (High Court, March 9, 2012) and T 1839/11 *Enzyme granules/Novozymes* (EPO TBA, June 29, 2012).

The decision shows the importance of considering (and coordinating) multiple jurisdictions when engaged in patent litigation of strategic importance. This applies particularly in Europe, where (pending agreement on a Unitary Patent and Unified Patent Court[1]) patent litigation must generally be conducted on a country-by-country basis in parallel with any post-grant oppositions before the European Patent Office.[2]

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The courts in Europe will not determine a single forum for the case, but instead each side can choose the jurisdiction(s) which they perceive provide the best procedural tools and proceed with those actions in parallel. For example, patentees often prefer Germany, where infringement and validity proceedings are bifurcated and infringement is typically decided first, save where the infringement court can be convinced (on the basis of a limited consideration of validity) that it should stay its proceedings pending the outcome of the validity proceedings.

Defendants, by contrast, often prefer the United Kingdom, where anyone may seek revocation, cases proceed reasonably quickly with the forensic advantages of document disclosure and witness cross-examination, and the successful party can recover a high proportion of its legal costs from the losing party.

An EPO opposition has the major advantage for a defendant of being able to revoke a patent throughout Europe, but has frequently been criticized for being slow to decide cases. However, where it accelerates a case in the light of national infringement proceedings, the EPO can be the first to make a final appellate decision and end the case, as occurred here.

The value of European proceedings in parallel with litigation in the United States or elsewhere should not be overlooked. Although non-disclosure of conflicting positions adopted before the EPO and U.S. Patent and Trademark Office may no longer constitute inequitable conduct, following the Federal Circuit's en banc opin-

[1] A political agreement was reached by the Council on June 29, with the goal that the Unitary Patent system would enter into force in 2014, but this agreement was not accepted but instead sent back to the Legal Affairs Committee by the European Parliament on July 2. The use of the ''enhanced cooperation'' procedure under Council Decision 2011/167 [2011] OJ L76/53 is also being challenged by Italy and Spain in Joined Cases C-274/11 and C-295/11, to be heard on Sept. 25.

[2] This is the effect of Regulation 44/2001 [2000] OJ L12/1, Article 22(4), as applied by the European Court of Justice in Case C-4/03 *GAT v LuK* [2006] ECR I-6509 and Case C-539/03 *Roche v Primus* [2006] ECR I-6535. However, note that a different approach is taken to preliminary injunctions following Case C-616/10 *Solvay v Honeywell* (ECJ, July 12).

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ion in *Therasense v. Becton Dickinson*,[3] launching parallel proceedings may still force the other party to take positions on claim construction or prior art at an earlier stage than in the U.S. proceedings, and may increase the pressure to reach a commercial resolution of the dispute.

The proceedings in the five jurisdictions will be considered first, followed by commentary on the broader implications and the importance of disclosure.

Background

Danisco (now part of DuPont) and Novozymes are two of the biggest enzyme producers in the world. Enzymes are used in a wide variety of industrial processes to speed up desired reactions. They are particularly used in detergents (for instance to help break down proteins, oils, fats and starches) but enzymes such as phytase are also used in animal feed (to improve the efficiency of digestion and reduce pollution). Enzymes can be damaged (denatured) over time by heat and moisture and so they are carefully formulated to improve their stability.

In 1992, Novozymes filed a patent application claiming the formulation of enzyme granules with a coating of fat and salt for use in steam-pelleted animal feed. That formulation was commercially known as Coated Thermostable (or CT) and dominated the market for pellet-stable phytase.

From about the same time, one of Danisco's subsidiaries, Genencor, had been formulating and commercializing salt-coated enzyme granules for use in detergents. It had filed various patents on specific aspects of these formulations.

However, Novozymes then filed its own patent applications covering salt-coated formulations.

First, in 1998, Novozymes filed a patent application broadly claiming salt-coated enzyme granules for use in all fields, including detergents and feed. This was granted by the EPO as EP 1,092,007 (EP '007) and was opposed by Genencor. It was upheld in amended form by the Opposition Division of the EPO but was revoked as obvious by the Technical Board of Appeal of the EPO in March 2010.[4] The TBA relied upon a disclosure of salt-coated granules by Genencor as the closest prior art in finding that there was no inventive step.

Second, in 2004, Novozymes filed a patent application claiming salt-coated enzyme granules specifically for use in the production of steam-pelleted animal feed. In parallel, Genencor had been developing salt-coated enzyme granules for use in feed, which Danisco launched in 2007. Those commercial products were promptly analyzed by Novozymes, which then amended its claims before the EPO, and its application was granted as EP 1,804,592 (EP '592) on Nov. 11, 2009.

Early 2010: Issue of Proceedings

On March 12, 2010, two days after EP '007 was revoked, Novozymes filed an infringement action against Danisco in Denmark under EP '592, seeking a preliminary injunction.

The parties then commenced further proceedings in rapid succession. First, Danisco opposed EP '592 at the EPO, requesting accelerated processing in view of the Danish infringement action. Novozymes then filed a further infringement action in Germany and Danisco responded with revocation actions in the Netherlands (where Novozymes counterclaimed for infringement) and in the United Kingdom.

Danisco argued in particular that EP '592 was obvious in the light of Novozymes' 1992 patent application for the CT coating for feed (known as D1) and its 1998 patent application which led to EP '007 (known as D3). Novozymes disputed this and said that the results from the two examples in EP '592 showed that salt coatings surprisingly provided for higher enzyme stability during steam-pelleting than the CT coating. Novozymes also said that the examples were repeatable and criticised Danisco for failing to provide evidence otherwise.

Late 2010: Disclosure in the United Kingdom

In the United Kingdom, unlike other jurisdictions in Europe, parties are required to disclose relevant documents in patent litigation (a more limited version of U.S. discovery). This obligation covers documents which adversely affect a party's own case or support the other party's case, but is limited to documents which were created in the window from two years before to two years after the claimed priority date of the patent.

Disclosed documents can only be used for the U.K. proceedings unless the disclosing party agrees or the court orders otherwise. However, documents relied upon will typically be released at trial so far as possible to ensure transparency of justice.[5]

Anticipating that the examples in EP '592 were in fact unrepresentative, Danisco sought early disclosure and specifically requested documents relating to tests by Novozymes of granules falling within the scope of the patent claims. Some disclosure was made in December 2010, although Novozymes continued to disclose documents throughout 2011.[6]

Early 2011: Denmark and the Netherlands

Novozymes' application for a preliminary injunction was heard by the Danish court in January-February 2011, which was followed shortly after by a trial in the Netherlands in February 2011. The Danish court granted the preliminary injunction in March 2011, while in June 2011, the Dutch court surprisingly held EP '592 valid and infringed (and granted an injunction, although notably Novozymes did not seek to enforce this in the Netherlands). Danisco appealed both decisions, but the appeals would not be heard until 2012 and 2013, respectively.

July 2011: EPO Opposition Division

With Danisco facing injunctions in Denmark and the Netherlands, the scene was set for consideration of validity by the Opposition Division.

In April 2011, the Opposition Division issued a nonbinding preliminary opinion, indicating that Claim 1 appeared to lack novelty over D1 but that if that objection

[3] *Therasense v. Becton Dickinson & Co.* 649 F.3d 1276, 99 USPQ2d 1065 (Fed. Cir. 2011) (82 PTCJ 40, 6/3/11).

[4] T 0752/07 *Coated enzyme granules/Novozymes* (EPO TBA, March 10, 2010).

[5] As will be explained below, some of the disclosure documents in this case were subsequently released by the U.K. court and the EPO, and those released are relied upon in this article together with the public judgments.

[6] Novozymes' solicitors gave evidence that Novozymes had failed properly to understand the advice it was given at the outset as to the scope of disclosure.

could be overcome no strong arguments had been filed against inventive step.

In preparation for the hearing, both parties filed further submissions. Interestingly, Novozymes filed an experimental report which it said showed the detrimental effect in all cases of a particular additive (corn steep liquor) on the stability of enzymes during steam pelleting. In response, Danisco asked Novozymes for permission to use results disclosed in the UK which it said contradicted the experiment. After some discussion, Novozymes allowed those results to be used, and ultimately did not place any reliance upon its experiment at the hearing.

After a long hearing on July 7, 2011, the Opposition Division determined that EP '592 was invalid and revoked it. It delivered the grounds for its decision on Aug. 5, 2011, finding the patent obvious in light of D1 and D3.

However, Novozymes appealed immediately, which meant that the revocation was suspended pending the outcome of the appeal. Novozymes filed its grounds of appeal at the end of 2011 and, with both parties requesting acceleration, the hearing was set for June 2012.

Mid-2011 - Early 2012: United Kingdom, Germany and Appeal in Denmark

Before then, trials were due to be heard in the United Kingdom in October 2011 and in Germany in December 2011, with the Danish appeal to follow in February-March 2012.

In the United Kingdom, Danisco had provided its fact evidence (Novozymes chose not to explain its disclosure documents) and the parties had started to exchange expert evidence. Tragically, Danisco's expert witness (Alfred Gaertner) then became seriously ill and passed away in September 2011. That made a fair trial in October 2011 impossible, and the parties agreed to adjourn the case to March 2012, three months before the EPO appeal in June 2012.

Danisco applied to have the case stayed until after the EPO appeal and to have certain disclosure documents released for use in the EPO proceedings, arguing that Novozymes was misleading the EPO and other foreign courts. Novozymes resisted both applications. First, it said that the case should not be stayed because it planned to launch its own salt-coated enzyme granules in 2012 or 2013 and wanted a decision before then.

Second, it said that the disclosure documents ought to be considered at trial in the United Kingdom before being released for use elsewhere. Both of Danisco's applications were rejected by the court in December 2011, which held that it was best placed to consider the documents first.[7] Danisco then asked the EPO to order that the documents be released, but the EPO refused to do so.

From the documents already disclosed, Novozymes appeared to have abandoned its development work on salt-coated granules within the 2002-2006 window. In the light of Novozymes' planned launch of salt-coated granules, Danisco requested specific disclosure of documents post-dating that window which would cover the tests conducted by Novozymes in developing those new commercial granules. That application was granted by the court in February 2012 and appears to be the first time the English court has extended the disclosure window in a patent case.[8]

However, shortly before the trial was due to start in March 2012, Novozymes applied for an adjournment on the basis it could not be ready for trial, in part because of the burden of the new disclosure.[9] The court found that it was Novozymes' own fault that it could not be ready for trial, in particular because it had chosen not to file fact evidence to explain its development work in June 2011 and had delayed in providing disclosure.

Given the arguments which the parties had raised in December 2011, the court ordered adjournment of the trial until October 2012, but allowed all the disclosure documents to be used in the EPO and other jurisdictions, provided the parties used their best endeavours to keep them confidential. Novozymes also undertook not to resist the introduction of the documents into the EPO or seek an adjournment of the EPO proceedings because of their introduction.

In Germany, following the Opposition Division's finding on invalidity, Novozymes agreed to stay the case in relation to EP '592 pending the EPO appeal. In Denmark, the appeal against the preliminary injunction was heard in February and March 2012, leading to the court lifting the injunction in May 2012 on the basis of its assessment of validity (for the first time ever).

June 2012: EPO Board of Appeal

The parties then returned to the EPO for the appeal, following which (if the patent was upheld) there would be trials in the United Kingdom, Germany and Denmark together with the appeal in the Netherlands.

As anticipated, Danisco filed U.K. disclosure documents at the EPO demonstrating various non-working embodiments. By way of example, Novozymes' own documents showed that in the third steam-pelleting trial it conducted (after the two in the EP '592 examples relied upon as ''*repeatable*''), the granules ''*did not give the expected high pelleting stability from salt coatings as seen in the first two trials*'' and Novozymes' own conclusions were that ''*the picture is blurring as almost identical formulations have resulted in pelleting stability below, at or above the standard CT reference*.'' Unsurprisingly, Danisco argued that these and other results showed that the patent lacked inventive step and/or was insufficient across its broad scope.

The Board of Appeal set aside two days to hear the appeal (June 28–29). By the end of the first day, it indicated that Novozymes' claims were obvious in view of the same documents relied upon by the Opposition Division (D1 and D3), particularly having regard to the evidence from the U.K. disclosure documents. The board specifically relied on embodiments which did not provide a higher enzyme stability during steam-pelleting compared to the CT coating, meaning that Novozymes could not rely on such an improvement to show inventive step across the scope of the claim.[10]

[7] [2011] EWHC 3288 (Pat).

[8] [2012] EWHC 389 (Pat).

[9] [2012] EWHC 696 (Pat).

[10] Often described as ''Agrevo'' lack of inventive step, following T 0939/92 *Triazoles/Agrevo* (EPO TBA, Sept. 12, 1995). In the United Kingdom, this is usually considered under the heading of insufficiency.

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The following morning, Novozymes sought to disclaim some of these embodiments.[11] However, those disclaimers were not admitted into the proceedings because they were filed too late and raised factual and legal issues which were not straightforward. Therefore, EP '592 was finally revoked.

In terms of confidentiality, the Board of Appeal noted that it was faced with a situation which ''*is unusual and, so far as the board is aware, unique in proceedings before the Office, in that [Danisco] has obtained these documents from [Novozymes] as part of the English disclosure system but subject to an obligation of confidence and before it was known whether the respondent would be released from this obligation after a trial in the English Proceedings*.'' In the board's view, the documents should be admitted and it could only prevent public inspection of the documents if they would not serve the purpose of informing the public about the patent (Rule 144(d) EPC). The board found that much of the information in the documents served that purpose and so, subject to minor redactions, made the documents available on the public file.

Comment

This case illustrates very clearly both the value and risk of pursuing multiple proceedings when engaged in patent litigation in Europe. Novozymes was successful in obtaining a preliminary injunction at first instance in Denmark, but this was reversed on appeal. In the Netherlands, having started the proceedings in the hope of a quick revocation of the patent, Danisco was disappointed to see the patent upheld and an injunction granted, albeit not enforced.

In the United Kingdom, the disclosure rules meant that Novozymes had to hand over documents which showed that various granules within the scope of the claims failed to improve stability after steam pelleting. Those documents, which proved decisive in the EPO, would not otherwise have been released.

In Germany, the case was stayed after the speedy decision by the Opposition Division. In the EPO, with accelerated processing, the patent was revoked at two instances just two and a half years after grant, which appears to be a record.

The case also illustrates the importance of coordinating multiple jurisdictions, whether using different offices of law firms or different law firms.

Danisco used a wide range of representatives in the five jurisdictions: Hoffmann Eitle in the EPO and Germany, Arnold & Porter in the United Kingdom and the EPO, Kromann Reumert in Denmark, Hoyng Monegier in the Netherlands, and Field Fisher Waterhouse in Germany, all coordinated by Danisco's chief IP counsel, Soonhee Jang, based in California. Novozymes had a similarly wide cast of representatives.

Ensuring that all these professionals collaborated to ensure that the best possible case was run consistently across the jurisdictions was time-consuming and required at times careful judgment calls to decide between competing strategies, as any differences were quickly relied upon by the other side. It is unimaginable that Novozymes' EPO counsel would have made some of the submissions they did if they were fully aware of the contents of Novozymes' own disclosure documents and the risk that those would be produced before the EPO as a result of the U.K. proceedings.

That demonstrates the practical importance of ensuring that all counsel are aware not only of helpful documents but also of documents which could undermine their case. It also shows the importance of some form of disclosure in a litigation system to ensure that parties do not make submissions which they ought to know are not supportable on their own documents.

Theoretically, much of the procedure for intellectual property litigation has been harmonized in the EU, including the possibility of disclosure.[12] In practice, although courts have the discretion to order disclosure, that discretion is exercised very differently by courts in different countries and does not cover the EPO.

Even in the United Kingdom there have been judicial suggestions that consideration should be given to cutting down or even abandoning disclosure on grounds of cost.[13] As discussions continue in Europe in relation to a Unitary Patent and Unified Patent Court, it remains important to consider not only the cost but also the benefit of disclosure in patent litigation.

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[11] Seeking to rely on G2/10 *Disclaimer* (EPO EBA, Aug. 30, 2011).

[12] Directive 2004/48 [2004] OJ L195/16, Article 6(1), which reads in relevant part ''Member States shall ensure that, on application by a party which has presented reasonably available evidence sufficient to support its claims, and has, in substantiating those claims, specified evidence which lies in the control of the opposing party, the competent judicial authorities may order that such evidence be presented by the opposing party, subject to the protection of confidential information.''

[13] Lord Neuberger MR, ''Developing Equity—a View from the Court of Appeal,'' speech to the Chancery Bar Association Conference, Jan. 20, 2012. Lord Neuberger is to become the president of the U.K. Supreme Court on Oct. 1, 2012, and his views on disclosure have been echoed by some of the patents judges.