

Danisco v. Novozymes - DC The Hague v. Opposition Division

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To stay, or not to stay, that is the question. But not in the recent *Danisco v. Novozymes* case before the District Court of The Hague. On the face of the Court's decision of 22 June 2011, the question whether to stay the national proceedings pending the outcome of opposition proceedings at the EPO on the validity of the same patent, was not asked. One of the rationales to ask this question, is the risk that national proceedings and EPO proceedings may come to different conclusions. As was the case in the case at hand: just two weeks after the Court held Novozymes' patent related to *Enzym granules* valid and infringed by Danisco, the Opposition Division revoked the patent in its entirety.

The Opposition Division ("OD") decision, also between Danisco and Novozymes, has recently become available. It states that Novozymes submitted a "copy of a Dutch Court decision on infringement proceedings" in the procedure. That the Dutch Court also provided a decision on validity is omitted. An unconscious omission reflective of the influence of the Court's ruling on the OD's decision? Neither the OD's decision nor the minutes of the hearing provide the answer. Hereafter follows a comparison of the Court's decision, and the OD's differing opinion on novelty and inventive step. A shorter insight in the stay of procedures, which involves more interests to balance than preventing the risk of divergent decisions, may follow in a future blog post.

The Patent

Novozymes' patent in question (EP 1 804 592 B1) claims a method for manufacturing an animal feed composition comprising the steps of mixing feed components with granules comprising a core and a coating, wherein the core comprises an enzyme, and steam treating and pelleting said composition, with the characterising feature that "the coating comprises a salt which has a constant humidity at 20°C which is above 60%". Danisco claimed revocation of the patent before the Court for, a.o., lack of novelty and inventive step, as it did in opposition proceedings. Novozymes counter claimed for (indirect) infringement.

Novelty

For its novelty attack before the Court and OD Danisco relied on a prior art document called "Jacobsen". Jacobsen explicitly described a method such as claimed by Novozymes, except for the characterising feature. Danisco argued before the Court that this feature was also disclosed, since Jacobsen claimed as a coating the salts magnesium silicate or calcium carbonate which have a constant humidity above 60% at 20°C.

The Court acknowledged that calcium carbonate has a constant humidity at 20°C which is above 60%: 99,9% according to expert evidence. However, the Court considered that this does not mean that the characterising feature has been *directly and unambiguously* disclosed in Jacobsen (para. 4.20):

"To the court's judgment, this reasoning ignores how the skilled person, using his common general knowledge, would understand the characterising feature of claim 1 of the patent. After all, also when it comes to novelty the claim of a patent should be read in context of the description and the drawings."

The Court considered that, in view of the definition of constant humidity in the description, the skilled person would understand that the parameter of constant humidity is in fact used to indicate and determine a salt's hygroscopic characteristics, i.e. the ability to attract water. Parties agreed that the characterising feature functions as a test to determine whether a salt is suitable to be used in the invention. A high constant humidity entails a low hygroscopicity. To be able to function as a *moisture barrier* during the steam pelleting step of the method, the salt should have a low hygroscopicity (and therefore a high constant humidity), but no hygroscopicity is not desirable: the salt should have some ability to attract water.

Since constant humidity is used as a test for hygroscopicity, the skilled person would also understand that the claimed salt should have *some* hygroscopicity. The skilled person would, on the basis of his common general knowledge, understand that it is useless to use constant humidity as a test to measure the ability to attract water of salts that are (nearly) insoluble and therefore (almost) not hygroscopic, such as the salts disclosed in Jacobsen.

Given this context based interpretation, the Court concludes that Jacobsen does not disclose a salt according to the claim, i.e. that is (somewhat) soluble. To put it differently, while the claim does not contain an upper limit for constant humidity (and therewith a lower limit for hygroscopicity), such an upper limit would be read into the claim by the skilled person on the basis of the description of the patent and using his common general knowledge.

The OD considered that the claims in question lacked novelty over Jacobsen which discloses a method to manufacture steam pelleted food composition and magnesium silicate, while (para. 4.2) "the constant humidity of magnesium silicate would appear to be close to 100% (i.e. above 60%)." In response Novozymes referred to the definition of constant humidity, and EPO's TBA's case T190/99, which proposes that the skilled person, when considering a claim, should rule out interpretations of a claim which are illogical or do not make technical sense. Other than the Dutch Court, the OD was not convinced by Novozyme's argument that non-soluble salts would not be considered by the skilled person to have a constant humidity since this constant humidity of a saturated magnesium silicate solution is not measurably distinct from pure water.

The OD concluded (para. 4.2):

"The claims should indeed be taken at face value. [...] In the present specification, poorly soluble salts were not excluded from the claims. No arguments had been made or could be envisaged for this not being the case and as such, the present claims 1 and 12 could not be considered novel over the teaching of [Jacobsen]".

The OD did conclude that the claims of an auxiliary request filed by Novozymes, limited to a list of salts not mentioned in Jacobsen, was novel.

Inventive Step

The Dutch Court, applying the problem-and-solution approach, also held the patent inventive. Jacobsen was determined to be the closest prior art, and the objective technical problem as providing improved enzyme activity / stability in case of steam pelleting.

Danisco argued, a.o., that the claimed solution was obvious over Jacobsen as closest prior art, in combination with a prior art document called Markussen. According to Danisco the skilled person would apply a salt coating disclosed in Markussen in the method described in Jacobsen and come to the claimed solution.

The Court rejected Danisco's argument, considering that Jacobsen relates to another solution to protect granules (i.e. the use of a different (wax) coating) and Markussen does not teach that the disclosed coating is suitable for steam pelleting, a method step of the claimed invention.

The Court also considered that (para. 4.42) "Jacobsen does not contain a pointer to the publication of WO 793 (Markussen)". This wording almost seems to indicate that the Court longs a literal pointer in Jacobsen to Markussen, therewith echoing the condition under the PSA's could-would approach that the combined document found by the skilled person (i.c. Markussen) should contain a pointer to the solution.

A clarification of the wording may be found in the Court's consideration later on that the skilled person would not find Markussen starting from Jacobsen. The Court considered this with so many words as it rejects Danisco's argument that it would be obvious for the skilled person to apply the coating disclosed in Markussen in the process disclosed in Jacobsen, since Markussen explicitly presents Jacobsen as state of the art over which it tries to improve (para. 4.42):

"The court considers this a form of hindsight reasoning. After all, while it is not certain that the skilled person would consult the Markussen publication on the basis of Jacobsen, this reasoning takes the information as disclosed in Markussen as a starting point, while the reference to Jacobsen in that publication is seized to arrive again, in a reverse engineering kind of way, at Jacobsen's hydrophobic granules suitable for steam pelleting."

Danisco's "reverse engineering" is dismissed and the patent held inventive.

In the opposition proceedings Jacobsen was also considered to be the closest prior art, and Markussen the combined prior art. The formulated objective technical problem was comparable to the Dutch Court, i.e. providing stability to enzyme granules.

The OD had some other thoughts on above mentioned reverse engineering kind of interaction between Jacobsen and Markussen than the Dutch Court. The back-reference in Markussen may even point "forward", i.e. to Jacobsen if Markussen was considered closest prior art. How the skilled person would find Markussen starting from Jacobsen as such seemed less of a problem to the OD (para. 5.4):

"The division sees that the skilled person is directed towards [Markussen] in finding a solution for the problem of stability. The skilled person [...] would not see [Markussen] as laying beyond their area of competence. The back-reference in [Markussen] to [Jacobsen] also underlines the shared technical field and the proximity of the documents in terms of problems being addressed. Additionally, [Markussen] mentions the utility of its teaching in the area of animal feeds. [Markussen] makes a clear disclosure of using high constant humidity salt in the coating of enzyme granules to enhance stability. Thus in light of the combination of [Jacobsen] and [Markussen], the patent lacks inventivity. It should also be mentioned that should [Markussen] were considered as closest prior art, the back reference to [Jacobsen] would also lead to a similar conclusion that inventive step is lacking since the skilled person would be motivated to apply the advantages of [Markussen] in the process of [Jacobsen]."

Infringement

The Dutch Court also held the patent (indirectly) infringed by Danisco, considering that:

"as under the above mentioned lack of novelty argument on the basis of Jacobsen, Danisco holds on to [...] a too strict, literal interpretation of claim 1 of the patent."

Again, the Court applies a context based interpretation:

"The mere circumstance that [Danisco's sodium sulfate] anhydrate does not fulfill the characterising feature, does not mean in this case that there is no infringement."

In short, the Court reasoned that the skilled person would understand on the basis of the description and subclaims that both the hydrate and anhydrate form of sodium sulfate would be suitable to apply in the invention.

The result of the Court's claim interpretation may seem like a double edged sword: on the one hand it brings forth an upper limit on which Danisco's novelty attack fails, while on the other hand it results in Danisco's salt coating to fall under the scope of protection.

Whatever the classification, this "Dutch Court decision on infringement proceedings" did not prevent the OD from concerning the patent invalid. To quote the UK Court of Appeal's summary in the *Glaxo Group* case of

Jacob LJ's answer when he considered the stay of proceedings in the *Unilin* case to, what Jacob LJ considered to be an unhelpful question, *Which is "top"? - the EPO or a national court?*

The EPO was "top" in the case where the patent was still in opposition when a national court holds it to be valid and the EPO then revokes, while the national court was "top" in the sense that when the EPO holds the patent to be valid a national court may subsequently revoke the patent.

- The Dutch Court's decision can be read [here](#) (Dutch).
- An English translation of the Dutch Court's decision can be read [here](#).
- The Opposition Division's decision can be read [here](#) (English)
- UK Court of Appeal references:
 - *Unilin Beheer BV v. Berry Floor NV & Ors* [2007] EWCA Civ 364
 - *Glaxo Group Ltd. v. Genentech Inc. and Biogen Idec Inc.* [2008] EWCA Civ 23