

Syntroleum Corp v Neste Oil Singapore Pte Ltd
[2014] SGHCR 18

Case Number : Suit No 120 & 510 of 2013, Summons No 537 & 538 of 2014
Decision Date : 30 September 2014
Tribunal/Court : High Court
Coram : Yeong Zee Kin SAR
Counsel Name(s) : Vignesh Vaerhn with Keefe-Martin Han Wang Zhou (Allen & Gledhill LLP) for the plaintiff; Ms Indulekshmi Rajeswari with Koh Teck Hock Gerald (Drew & Napier LLC) for the defendant.
Parties : Syntroleum Corp — Neste Oil Singapore Pte Ltd

Civil Procedure – Discovery & Inspection – Disclosure of inventor’s notes

Civil Procedure – Discovery & Inspection – Disclosure of experimentation results

Civil Procedure – Order 87A – Rule 6 – Notice of experiment

30 September 2014

Judgment reserved.

Yeong Zee Kin SAR:

1 This is a set of applications for the disclosure of three categories of documents. The first category is inventor’s notes in relation to the patents in issue, namely Singapore patents numbered 172045 and 169053 (“**the 045 patent**” and “**the 053 patent**” respectively, or “**the Plaintiff’s Patents**” collectively). The next two categories are the experimentation results obtained by the plaintiff in tests that it performed on the defendant’s product and on the output obtained from following the instructions in US Patent No 5,705,722 (“**the US 722 patent**”).

2 Parties came before me on two occasions – 25 July and 6 August 2014 – for submissions. At the hearing of 6 August 2014, the plaintiff tendered amended prayers for these applications (and also withdrew the last prayer in Summons No 538 of 2014). At the hearing on 14 August 2014, I gave my decision to dismiss the applications and also ordered that the time for any appeal shall commence from the date of these detailed grounds of decision.

Defendant’s application

3 The defendant filed two summons applications, one each into the two related suits. Summons No 537 of 2014 was filed in Suit 120 of 2013; and Summons No 538 of 2014 was filed in Suit 510 of 2013. The issues in both suits are substantially similar, differing only in that there are two patents in issue. The categories of documents sought in both summonses are also substantially similar. Apart from the complexity arising from the subject matter involved, these are straight forward claims by the plaintiff that the defendant had infringed its petrochemical patents. The defendant denies infringement and counterclaims by alleging that the patents are invalid by reason, *inter alia*, of the defendant’s prior sale of its NEXBTL product and for insufficient disclosure.

4 The defendant seeks the disclosure of a category of documents that can be referred to in short hand as inventor’s notes. The initial scope of discovery was for all invention filings, internal

reviews of prior art and correspondence between the inventors in relation to the Plaintiff's Patents. In the amended prayers tendered at the second hearing, the period for disclosure was limited to a four-year period commencing on 10 December 2006 for Summons No 537 of 2014 and 21 August 2006 for Summons No 538 of 2014. Disclosure of this category was also restricted to claims 22 to 27 of the 045 patent and claim 1 of the 053 patent. The request for disclosure was further limited to the issue of novelty and inventive steps.

5 The second category of documents sought by the defendant are the plaintiff's experimentation results obtained from tests conducted on the defendant's NExBTL products. These are products that the defendant had been selling before the priority date of the Plaintiff's Patents.

6 The third category of documents sought by the defendant is similar to the second, except that this relates to experimentation results obtained by the plaintiff in its tests conducted in accordance to the instructions set forth in the US 722 patent. These are restricted to experiments conducted in 2 years, namely 2006 and 2012. For Summons No 537 of 2014, the amended prayer restricts the request to the experimentation results relating to analysis of the weight percentage of even-carbon number paraffins contained in the output from the process set forth in the US 722 patent. For Summons No 538 of 2014, the amended prayer restricts the request to the experimentation results that anticipate the combination or incorporation of features of Claim 1(d) and (e) of the 053 patent with the process described in the US 722 patent.

7 The defendant's submissions for the disclosure of inventor's notes and experimentation results are premised on authorities from *Howaldt Ltd v Condrup Ltd* (1936) 54 RPC 121, *Lightning Fastener v Colonial Fastener* (1934) 51 RPC 349, *Halcon International Inc v Shell Transport (Discovery No 2)* [1979] RPC 459 to *SKM v Wagner Spraytech* [1982] RPC 497. The defendant argues that inventor's notes are relevant as evidence of what the state of the art was at the time of invention and whether the steps taken by the inventor was obvious to the ordinary man skilled in the art. The defendant seeks to adduce such inventor's notes as secondary evidence. The defendant also seeks to admit inventor's notes as evidence of his subjective views on the authority of *Vickers plc v Horsell Graphic Industries Ltd* [1988] RPC 421, particularly where he had expressed inconsistent views during the prosecution of his patent in different jurisdictions. The defendant's main submission for the disclosure of the experimentation results obtained by the plaintiff from tests conducted on the defendant's NExBTL product and the US 722 patent is that these will go to show that the plaintiff's patents were anticipated by the prior art.

Plaintiff's objections

8 The plaintiff takes objections to the disclosure of inventor's notes and experimentation results on the ground that reliance should be placed on more recent authorities in *Glaverbel SA v British Coal (No 2)* [1993] RPC 90, *Mölnlycke AB v Procter & Gamble Ltd* [1994] RPC 49 and *Nichia Corp v Argos Ltd* [2007] FSR 38. The plaintiff argues that with the adoption of the objective standards in *Windsurfing International Inc v Tabur Marine (Great Britain) Ltd* [1985] RPC 59, the subjective knowledge and intentions of inventors are no longer relevant and should therefore be excluded. During oral submissions, counsel for plaintiff sought to persuade me that this exclusion should be complete and urged that I follow the dissenting opinion of Jacob LJ in *Nichia Corp*.

9 The plaintiff also raised objections based on Order 87A, rule 5(2)(b), which limits disclosure of "documents relating to any ground on which the validity of a patent is put in issue" to a period of four years on either side of the earliest claimed priority date. It should be noted that at the adjourned hearing on 6 August 2014, the defendant had amended its prayers in relation to the disclosure of inventor's notes to confine its request within these limits.

10 The plaintiff also objects to the disclosure of inventor's notes and experimentation results on the ground that these were private documents that do not form part of the publicly available state of the art. The plaintiff argued that subjective intentions of the inventor and state of his subjective knowledge no longer have any relevance post-*Windsurfing*. For these reasons, the plaintiff submits that they are irrelevant to establishing what the state of the art was at the time of the invention as the court is constrained to make this determination based on documents that are publicly available. Additionally, the plaintiff's position in relation to the experimentation results obtained from tests conducted on the defendant's NExBTL product is that they had never carried out any such tests and therefore, there is nothing to disclose.

Inventor's notes

11 I turn first to consider the request for discovery of inventor's notes. The initially overly broad request was, at the penultimate hearing, narrowed significantly. However, I nevertheless dismissed the application and give my reasons for doing so in this section. Before delving into the case law, I should state that narrowing of the scope of the request could not have saved the application for the reason that the revised scope was significantly different from that which was initially requested. Parties had spent a considerable amount of time preparing for the hearing of these applications and filed a number of affidavits on the basis of the scope of discovery sought in the original request. The issues that were canvassed through the affidavits and during submissions in an application for the disclosure of *all* inventor's notes are significantly different to those that would have been canvassed when disclosure is confined to a two-year period commencing from 10 December 2006, restricted to the issues of novelty and inventive steps and further limited to specific claims in the Plaintiff's Patents. Had the request been made with this degree of specificity, the plaintiff's position would have been very different and the arguments that were put forward during the hearing of the application would have also taken a very different path. As it were, most of the affidavits and submissions focused on the issue of whether inventor's notes ought to be discoverable, instead of dwelling on the specific issues of novelty and inventive step that the inventor's notes would have been used to prove or disprove. These particulars only emerged when the amended prayers were tendered at the second hearing. It was therefore unsurprising that the plaintiff's counsel had intimated that if the application were to proceed on the amended prayers, fresh instructions would have to be taken. In the end, I thought that it is better for the application to be dismissed and for the defendant to make a separate application, after taking further instructions and considering the issues that I will now traverse.

Whether inventor's notes are discoverable

12 Plaintiff's counsel sought to persuade me that, on principle and as a general rule, inventor's notes are not discoverable. The thrust of the arguments is that since the adoption of the objective standard for assessing obviousness and inventive step, the analysis should be conducted in reliance on publicly available documents. Inventor's notes are not publicly available and thus not accessible to the hypothetical reasonably skilled person in the art. Reliance was placed on *Glaverbel SA v British Coal Corp (No 2)* [1993] RPC 90 for the proposition that inventor's notes are irrelevant and should therefore not be discoverable. Plaintiff's counsel also argued that a distinction should be drawn between cases allowing the disclosure of inventor's notes that were decided before the adoption of the objective standard in the decision in *Windsurfing International Inc v Tabur Marine (Great Britain) Ltd* [1985] RPC 59 and those that were decided after. The submission was that post-*Windsurfing*, inventor's notes were not discoverable since they are not relevant. Reliance was placed on Jacob LJ's speech in the more recent UK Court of Appeal decision of *Nichia Corp v Argos Ltd* [2007] FSR 38; [2007] EWCA Civ 741 for their submission that inventor's notes should not be discoverable.

13 The defendant relies heavily on an earlier UK Court of Appeal decision in *SKM SA and Another v*

Wagner Spraytech (UK) Ltd and Others [1982] RPC 497 to support their application. Their submissions are that inventor's notes are discoverable and, in answer to my query about how they intended to make use of the inventor's notes, they point to the usages that were set out in the speech by Oliver LJ in this decision. Defendant's counsel were quick to highlight that Jacob LJ's speech in *Nichia* was in the minority but the majority had allowed discovery.

14 A survey of the cases cited before me dispels the assumption, fundamental to the plaintiff's submission on the pre- and post-*Windsurfing* distinction, that the objective standard for assessing obviousness and inventive step was adopted only since the *Windsurfing* decision. On the contrary, the objective standard had been adopted earlier and a perusal of the 1982 *SKM* decision – which predates the *Windsurfing* decision by three years – will reveal that the objective standard was very much within the contemplation of the Court of Appeal (at p 500):

... quite apart from any of the decided cases, there appears, *prima facie*, to be no reason at all why the inventor's or patentee's researches should have any relevance to the question of whether a particular claimed invention is obvious. *Obviousness is an objective matter* ... What the inventor himself took as his starting point, what mental processes he went through and what experiments he conducted may tell the court a good deal about him personally but it will, so it is claimed, tell it nothing about the relevant issue in the inquiry, ie *whether the hypothetical skilled man would find the invention obvious*, unless the inventor is putting himself forward as the living embodiment of the hypothetical skilled man. [Emphasis added.]

15 It seems clear to me, after perusing all the cases cited before me, that inventor's notes are discoverable. This is a proposition that is beyond doubt. In *Halcon International Inc v The Shell Transport and Trading Co and Others (Discovery No 2)* [1979] RPC 459, Whitford J observed (at p 464) that "evidence as to the way in which an inventor arrives at the invention may, I think, be of considerable assistance to the court in reaching a determination as to whether what is alleged to be inventive was really little more than routine work". The decision of the Court of Appeal in *SKM SA and Another v Wagner Spraytech (UK) Ltd and Others* [1982] RPC 497 affirms that inventor's notes are discoverable and, as observed by Jacob LJ in the later decision in *Nichia*, was a watermark decision that prompted a *de rigueur* disclosure of inventor's notes whenever obviousness was in issue. Oliver LJ observed that since the decision in *Halcon*, there was a practice to order discovery of inventor's notes when obviousness is challenged. He also observed (at p 504) that "it has become usual to call the inventor to give evidence on the issue". He reasons that if the evidence of the inventor is material, then equally so will his notes be. Similarly in *Mölnlycke AB v Proctor & Gamble Ltd (No 3)* [1990] RPC 498, it was held that inventor's notes are relevant to the issues of obviousness and insufficiency of the patent. Most recently in *Nichia Corp v Argos Ltd* [2007] FSR 38; [2007] EWCA Civ 741, the Court of Appeal disagreed with the patent judge who had disallowed disclosure of inventor's notes on principle and remitted the case back for him to consider how a disclosure order could be tailored in order to ensure proportionality and to manage costs.

16 Before leaving this topic, I should comment on the plaintiff's submissions, made in reliance on *Glaverbel SA v British Coal Corp (No 2)* [1993] RPC 90, that inventor's notes, being evidence of his subjective intentions, thoughts and opinions which are not relevant, are therefore *ipso facto* not discoverable. A perusal of this case discloses that the passages in which Mummery J states the rationale for excluding inventor's notes deal with the *interpretation* of the patent claims. The court explains the rationale for this exclusionary rule (at p 94) thus:

The reason for excluding that evidence is the same as the reason for excluding evidence of prior negotiations leading to a contract, which is not admissible to construe a contract ... Such evidence is not regarded by the court as helpful or relevant in ascertaining the meaning of the

language in which the inventor and his advisers have described the invention.”

17 The decision of the Patents Court on this issue was upheld by the Court of Appeal in *Galverbel SA v British Coal Corporation and Another* [1995] RPC 255, holding (at p 268) that “evidence of the patentee as to what he intended it to mean should not be admitted ... a patent is construed objectively, through the eyes of a skilled addressee.”

18 The exclusionary rule, at least as articulated in *Glaverbel*, does not extend to an absolute bar to discovery or exclusion for other purposes, for example, to show the subjective intentions of the inventor (when this is relevant), the state of the art or to demonstrate that he has adopted inconsistent positions in different proceedings. That is not to say that inventor’s notes should be relied upon as primary evidence to prove or disprove obviousness. Obviousness is construed objectively through a purposive construction of the patent claims as drafted: *Mühlbauer AG v Manufacturing Integration Technology Ltd* [2010] 2 SLR 724; [2010] SGCA 6.

When inventor’s notes are to be disclosed

19 The question of when inventor’s notes ought to be disclosed was considered in the recent decision by the UK Court of Appeal in *Nichia Corp v Argos Ltd* [2007] FSR 38; [2007] EWCA Civ 741. The majority of the Court of Appeal disagreed with the decision of the patent judge that inventor’s notes should not be disclosed during standard disclosure as a *prima facie* rule and remitted the issue back for reconsideration, in particular whether disclosure can be restricted temporally and/or to certain classes of documents: *per* Rix LJ, at [73] – [74]. Although Jacob LJ’s speech was treated as dissenting, the majority shared the concerns that he articulated. The difference was that whereas Jacob LJ was in favour of a *prima facie* rule against disclosure of inventor’s notes during standard disclosure, the majority preferred to rely on “a rigorous application of the rationale of standard disclosure” (*per* Rix LJ, at [73]) in order to tailor a disclosure order that achieves “a just outcome, which includes limiting, as far as possible, the costs incurred” (*per* Pill LJ, at [82]).

20 The applications before me are for an order that the plaintiff files a further and better list, ie further discovery, after general discovery has been given. If the application as originally prayed for were to be granted, then it is tantamount to saying that inventor’s notes should be given during general discovery whenever obviousness is in issue. However, there are dangers in taking this approach as highlighted in the speech of Jacob LJ in *Nichia*. The alternative is to adopt a more calibrated approach for the disclosure of inventor’s notes, heeding the exhortation of the Court of Appeal in *Mölnlycke AB v Proctor & Gamble Ltd (No 3)* [1990] RPC 498 to keep secondary evidence firmly in its place. It is this latter approach that I adopted and will provide my reasons for doing so.

21 It is the speech of Jacob LJ that we should look to for a dissertation of the mis-steps in the area of automatus and overly broad discovery, which in patent cases is exemplified in the *de rigueur* disclosure of inventor’s notes. Jacob LJ begins with a reminder of the objective standard for assessing obviousness and explains why the assessment should be made with only reference to publicly available documents (at [16]):

... A patent is a public document. Any member of the public ought in principle to be able to make his own assessment of not only what the monopoly is, but whether that monopoly is valid. Obviousness is an objective question. If it depends on the private evidence or document of the patentee (or of anyone else) the purely objective nature of the question will be impaired.

22 The learned judge surveyed the case law and practice, concluding at [30] that:

So we have long been apparently inconsistent: on the one hand recognising and saying that obviousness is purely objective and on the other hand admitting evidence from inventors and paying attention to how the individual defendant struggled with the problem (or, in favour of obviousness had no problem and readily reached the alleged invention with no knowledge of it) or how he reacted upon learning about the invention.

23 Relying on the earlier Court of Appeal decision in *Mölnlycke AB v Procter & Gamble Ltd* [1994] RPC 49, Jacob LJ opined that inventor's notes are secondary evidence and "must be 'kept firmly in its place'" (at [32]), emphasising that disclosure ought therefore to be restricted in order to ensure proportionality.

24 Jacob LJ also cites (at [43]) Laddie J in *Hoechst Celanese Corp v BP Chemicals Ltd* [1997] FSR 547, at p 565, for his statement that "all the historical evidence of what individuals did or are thought to have done at or about the priority date is of no assistance in determining whether [the] development was obvious." In particular, the criticism that:

... although there was extensive discovery [of inventor's notes], very little of it was referred to in court and even the small number of documents which were took the case no further. This is a great pity because it has meant that parties have spent much more on this litigation than was necessary and the trial lasted longer than it ought. ...

However, there is much pressure now to reduce the cost of litigation in general and patent litigation in particular. Parties and the court must be astute to prevent the expenditure of time, effort and money on the filing and challenging of unnecessary evidence and discovery. As the Vice Chancellor said in *Mölnlycke* secondary evidence on the issue of obviousness must be kept firmly in its place. ...

25 After surveying the case law and reviewing the standards for disclosure post-Woolf reforms, Jacob LJ's conclusion, at [48], was that "standard disclosure no longer requires automatic wholesale disclosure of all the inventor's work. A lot will depend on the nature of the case of obviousness advanced." Where the objection to obviousness was straight forward, without raising any issues of commercial success or long-felt need, then the principle of proportionality favours a rule that disclosure of inventor's notes should not be ordered. However, Jacob LJ emphasised that intermediate positions were possible, depending on the issues raised in the case. He favoured appropriate disclosure orders tailored at case management conferences that restricted disclosure to specific periods; parties should also consider using interrogatories in place of discovery and giving indications whether the inventor will eventually be called at the trial. Jacob LJ concludes by stating that he did not consider *SKM* to remain the governing rule.

The bane of excessive discovery and automatus reproduction at trial

26 *Nichia* is not a straight forward decision to appreciate and deserves careful study. Whilst it is true that Jacob LJ's decision in dismissing the appeal was in the minority, the other members of the Court of Appeal shared Jacob LJ's concerns, in particular the need to keep secondary evidence like inventor's notes firmly in their place. The only difference is a question of timing: should the disclosure of inventor's notes take place as part of standard disclosure or subsequently, when their relevance is more evident. In this section, I explain why I agree with Jacob LJ's approach and why I had stressed in my dismissal of the defendant's application that it was without prejudice to the defendant making a subsequent application.

27 Jacob LJ's concern is that of indiscriminate disclosure and automatus reproduction of

discovered documents in its entirety for the trial. This has an adverse impact by driving up the costs of litigation. There are good reasons why we should not carry on litigation like we did in the past. This mischief was observed long ago by Whitford J in *Halcon International Inc v The Shell Transport and Trading Co and Others (Discovery No 2)* [1979] RPC 459, at p 465, where he made the following comments regarding the practice of increasing volumes of disclosure:

... I fear that in this action, as in so many other patent actions, the mere fact that an order for discovery is made may encourage the parties on both sides to reproduce an enormous number of documents, few of which will eventually ever be referred to all, at tremendous expense, and with the consequent waste of the court's time when reference has to be made to one of a vast number of other documents and it accordingly has to be sorted out from among them. *I say this only in the hope that parties will bear in mind that, even if discovery be given, they ought not necessarily to consider it as being a licence to reproduce each and every document which is in fact discovered*, for, if a practice which it seems to me is becoming more and more prevalent, to do just that, is followed, at some time hereafter it may be necessary to consider what the consequent result should be if it be found that documents reproduced have been quite unnecessarily reproduced. [Emphasis added.]

28 Almost three decades later, the practice appears to have become entrenched and the volumes given in discovery increased. In his speech in *Nichia Corp v Argos Ltd* [2007] FSR 38; [2007] EWCA Civ 741, at [33], *et seq* Jacob LJ gives an account of the history and the excesses of this practice:

33 ... When I was a pupil in 1967, I well recall Mr John Whitford QC (perhaps the leading silk at the time) saying "never call the inventor." And it certainly was not the practice for discovery of inventor's notebooks or the like to be sought or ordered. ...

34 It was only during the 1970s that the practice of seeking and giving discovery of inventors' records seems to have begun. And it was not until 1982 that the Court of Appeal endorsed it. That was in *SKM SA v Wagner Spraytech (UK) Ltd* [1982] RPC 497.

...

36 Following *SKM*, discovery of inventor's records became routine. No-one doubts that it has very considerably increased the expense of patent actions. Consider what is involved. First the documents have to be searched for and identified. This will involve reading them not only by lawyers but also perhaps by an expert or experts whose assistance in understanding may be needed. ... The inventor may be called in if available to explain his documents. Normally several lawyers and perhaps a patent agent will be required. ... Often translation will be involved. When all this is done, the documents are disclosed. The other side's lawyers aided by their experts then crawl all over them. As is usual they look for references to documents mentioned but not disclosed. This leads to inquiries about missing documents and disputes about that. Not infrequently there are disputes about confidentiality and the formation of complicated "confidentiality clubs" of designated lawyers, patent agents and independent experts, not to mention painfully detailed work on redaction of material said to be irrelevant. On both sides, many, many hours are spent and many pages are involved. *Not infrequently the whole lot ends up being copied for trial.*

37 And all for what? Only "secondary evidence" which must be kept "firmly in its place".

...

46 ... It is wrong just to disclose a mass of background document which do not really take the case one way or another. And there is a real vice in doing so: it compels mass reading by the lawyers on the other side, and is *followed usually by the importation of the documents into the whole case thereafter – hence trial bundles most of which are never looked at*. [Emphasis added.]

29 In summary, the mischief that is so rooted in our practice of civil litigation is the want of discernment in the selection of documents, given during discovery, when compiling the trial bundle. The issue can be arrested upstream if we are more vigilant in only giving discovery of documents that are necessary. For patent cases, I should think that secondary evidence like inventor's notes ought to be put through a fine sieve in order to avoid unnecessary disclosure.

Proposed framework for disclosure of inventor's notes

30 A close reading of *Nichia* reveals that there is a consistent message in all three speeches: that is to ensure that the discovery of secondary evidence is properly managed in order to adhere to the principle of proportionality and to manage litigation costs. Jacob LJ's preferred approach (at [48]) is "that standard disclosure no longer requires automatic wholesale disclosure of all the inventor's work. A lot will depend on the nature of the case of obviousness advanced." It would appear from this statement that it is within the contemplation of Jacob LJ that in an appropriate case, where the case of obviousness that is advanced warrants it, that inventor's notes may be disclosed during standard disclosure. In any event, Jacob LJ contemplated that the proper place for disclosure of inventor's notes is *after standard disclosure* pursuant to a specific disclosure request. Rix and Pill LJ, forming the majority of the Court of Appeal, preferred that the extent of disclosure of inventor's notes be a matter that parties work through with the patent judge during their case management conferences in order to tailor an appropriate disclosure order *during standard disclosure*. This would have required parties and the patent judge to delve into the particulars of the challenges to obviousness in order to identify the issues in order to tailor the standard disclosure order. To my mind, this is merely a difference in timing. The issues that would have surfaced in a more detailed discussion during case management conferences are very likely to be the same ones that will surface after expert reports are exchanged and experiments conducted in the run up to the trial.

31 Adapting these ideas to our context, I am of the view that inventor's notes should not be discoverable during general discovery – our equivalent of standard disclosure – *unless the issues for which they are required have been especially particularised*. These may be through pleadings (eg, the particulars of objections) or through a list of issues. We should keep firmly in mind that inventor's notes are secondary evidence pertinent to the issue of obviousness. As obviousness is an objective analysis, the primary evidence relied upon should be documents that are publicly available. Similarly, the issues and challenges faced by researchers in that field should be evidenced through publicly available documents. In many cases, we may never need to go beyond publicly available documents. Recourse should not be made to private inventor's notes unless it is necessary to do so.

32 Despite the differences of opinion as to when it ought to be done, the necessity of considering the issues at a sufficient level of granularity in tailoring an appropriate order for the disclosure of inventor's notes is the common thread that runs through all three speeches of the Court of Appeal in *Nichia*. This requires pleadings that delve into sufficient particularity. In the present case, the Particulars of Objections (Amendment No 2) does not contain much in the way of detailed pleading apart from identifying the claims challenged, the abstract ground of challenge (eg lack of novelty or inventive step) and the prior art. Had a greater level of detail been pleaded in the particulars of objections, the grounds on which the applications were contested would very likely have been different and my decision may well have been too. As things turned out, much of the submissions

dealt with the abstract legal issue of whether inventor's notes were discoverable. Even when I invited counsel for the defendant to state how the inventor's notes were intended to be used, the defendant could do no more than to point to the usages that Oliver LJ enumerated in his speech in *SKM SA and Another v Wagner Spraytech (UK) Ltd and Others* [1982] RPC 497, at p 507, *et seq.* Since the pleadings were lacking in particulars, the defendant's counsel could not assist the court in submissions that could have resulted in an order for discovery that was properly tailored to ensure proportionality and the management of costs. Had the level of detail present in the amended prayers been pleaded, I am confident that counsel would have offered greater assistance during submissions. As an aside, I should point out that the usages enumerated in *SKM* ought to be treated with circumspect in light of Jacob LJ's criticisms in *Nichia Corp v Argos Ltd* [2007] FSR 38; [2007] EWCA Civ 741, at [35] and [56].

33 Given the abstract level of the relevant pleadings, the plaintiff's failure to disclose inventor's notes as part of its general discovery cannot, to my mind, be faulted. In a future case, where the particulars of objections are sufficiently particularised to enable a proper consideration of not just the abstract grounds of challenge but the detailed issues, as well as a discussion of how the inventor's notes are intended to be used after disclosure, it is not inconceivable that inventor's notes may be directed to be disclosed as part of general discovery.

34 However, these applications were made subsequent to general discovery pursuant to specific discovery requests for this class of documents that the defendant submits ought to have been disclosed as part of the plaintiff's general discovery. At this stage of the proceedings, we have not made much progress beyond general discovery. The pleadings are no more particularised now than before general discovery. A list of issues has not been drawn up. Notices of experiments have not been filed or exchanged. We have not begun to discuss the issues that require expert evidence or how expert evidence ought to be made ready for trial. These applications are, to my mind, premature.

35 I have articulated my thoughts on how inventor's notes can be discoverable as part of general discovery in the event that the issues pertaining to the obviousness have been sufficiently particularised. In a case like the present, what would be an appropriate juncture to consider this sort of disclosure? I have in mind the trite common law principle, now enshrined in Order 24, rule 8, that discovery is an ongoing obligation throughout the case. As noted by the authors of the *Singapore Civil Procedure 2013* (Vol 1), at para 24/8/1:

This rule makes explicit what was previously implicit that a party's obligation to give discovery is *not* limited to documents which have come into a party's possession before the date of his list of documents. ...

See too *Vernon v Bosley (No 2)* [1999] QB 18; [1997] 1 All ER 614, in which the Court of Appeal reaffirmed that a party to civil litigation was under a continuing obligation until the conclusion of the proceedings to disclose all relevant documents whenever they came into his possession, unless they were clearly privileged from disclosure, notwithstanding that discovery by list or affidavit had already been made.

36 Having in mind the Vice Chancellor's exhortation in *Mölnlycke* that secondary evidence ought to be kept firmly in its place, the touchstone must be that inventor's notes become discoverable when the issues on obviousness are sufficiently particularised such that it becomes evident that these documents – or a part of them – are relevant and material to identified issues in dispute and their disclosure will therefore be necessary for the fair disposal of the case or for the saving of costs. Case law provides us with some guidance as to the particular junctures.

3 7 **When inventor to be called as a witness.** As Jacob LJ observed in *Nichia Corp v Argos Ltd* [2007] FSR 38; [2007] EWCA Civ 741, at [40], “there was no case where, when the patentee did not lead evidence from the inventor, disclosure of the inventor’s records played any part at all at trial.” Whenever the plaintiff intimates that the inventor is to be called as a witness, I think that is the juncture at which the issue of disclosure of his inventor’s notes has to be considered. Under our case management practices, this is not likely to take place until after discovery is past. This is not to say that a plaintiff may not be asked to state his intentions as to whether the inventor will be called as a witness before directions for general discovery are made. Having said this, I also do not think that a decision to call an inventor should put all of his notes into relevance, nor should this *ipso facto* render all his notes discoverable. I identify this merely as a trigger for parties to discuss the disclosure of inventor’s notes. I also find persuasive the submission of counsel for the plaintiffs in *SKM SA and Another v Wagner Spraytech (UK) Ltd and Others* [1982] RPC 497, Stephen Gratwick QC, who submitted, at p 500, that where “the inventor is putting himself forward as the living embodiment of the hypothetical skilled man”, and he is called as a witness to give evidence as such person, then his conduct of experiments and his notes would be relevant to demonstrate that the invention was not obvious.

3 8 **Whenever specific issues particularised.** The decision in *SKM SA and Another v Wagner Spraytech (UK) Ltd and Others* [1982] RPC 497, at p 507, provides another juncture that ought to trigger a consideration of the issue of discovery of inventor’s notes: Where the disclosure is confined to the production of a certain result (in this case, the effect of air jets deflected from the surface of a nozzle so as to surround the projected sheet of paint), inventor’s notes may be relied upon to demonstrate how a particular skilled man (ie the inventor) arrived at his conclusion and this can assist the court in its determination of how the hypothetical skilled man will operate. The particularisation of specific issues relating to obviousness may take place at any time, varying from case to case. As intimated above, if particulars are sufficiently detailed in the pleadings, then the disclosure should be part of general discovery. If not, then at any subsequent juncture when the issues become sufficiently clear, eg an amendment of pleadings, drawing up a list of issues, etc. As an aside, this appears, in my reading of *Nichia*, to be the only usage enumerated by Oliver LJ in *SKM* that survived Jacob LJ’s critique in *Nichia* (see paragraph 32 above).

3 9 **After exchange of expert reports or conduct of experiments.** As Jacob LJ observed in *Nichia Corp v Argos Ltd* [2007] FSR 38; [2007] EWCA Civ 741, at [64]:

So I think the judge was right to refuse disclosure. ... he is a very experienced judge who was clearly aware of the cost implications of the proposed disclosure and would readily have seen how proportionate it was, given how (to use his word) “peripheral” secondary evidence of this nature was. What he actually did was not to refuse it altogether. As he said, something might turn up in the experts’ reports or experiments to justify an order for it. But as things are now, he clearly held disclosure was not proportionate ... That was not wrong in principle.

40 The relevance (or irrelevance) of inventor’s notes becomes evident as the technical issues are sharpened through the procedures of experimentation and exchange expert reports. By this stage, we are very close to trial and the issues should be clearly defined.

Experimentation results

41 The reasons for my dismissal of the prayers for disclosure of experimentation results may be set out briefly, for the issues are not complex. Two categories of experimentation results were prayed for: (a) the plaintiff’s experimentation results obtained from tests conducted on the defendant’s NExBTL product and (b) experimentation results obtained by the plaintiff in its tests conducted in

accordance to the instructions set forth in the US 722 patent – see paragraphs 5 and 6 above. The defendant's case is that these experimentation results will go to show that the plaintiff's patents were anticipated by prior art.

From tests conducted on the defendant's NExBTL products

42 In respect of the prayer for disclosure of the plaintiff's experimentation results obtained from tests conducted on the defendant's NExBTL products, my reasons for dismissing the prayer are as follows. The prayer sought disclosure of experimentation results of tests conducted on the NexBTL products. The prayer in the summons application is for "documents concerning testing, review, evaluation and/or analysis of the Defendant's NExBTL-Diesel and/or NExBTL-Technology in at least 2012".

43 It emerged during submissions that what the defendant was truly after were the experimentation results from tests conducted by the plaintiff on the output of the process described in the defendant's Swedish Patent numbered 9700149 ("**the SE 149 patent**"). However, this was not what the defendant had prayed for, either expressly or by implication. The Particulars of Objections (Amendment No 2) does not give any hint that the experimentation results of the SE 149 patent is going to be of any relevance:

(a) Paragraphs 1.2.5 – 1.2.6 and 2.2.5 – 2.2.6 of the Particulars of Objections (Amendment No 2) are identical and aver to the availability of the NExBTL products in priority to the Plaintiff's patents:

1.2.5 Neste Oil Oyj in Finland began manufacturing a product called NExBTL produced from the hydrodeoxygenation and subsequent isomerization of biocomponents at its plant in Finland in 2007 and continued to do so until the priority date of Claim 22, i.e. the 10th December 2008. Buses in Finland used a 30% NExBTL blend in 2007 and 100% NExBTL beginning in April 2008. Neste Green diesel, containing at least 10% NExBTL, went on sale in Finland in May 2008.

1.2.6 NExBTL is an isoparaaffinic renewable diesel fuel.

(b) Additionally, the sole reference to the SE 149 patent is its enumeration in paragraph 4.3.4.12 as an article of prior art in the challenge to claim 25 of the 045 patent for lack of inventive step: "SE 9700149 made available to the public on the 6th August 1997 (*in particular its background art*)" [emphasis added].

44 Having considered both the prayer and the relevant paragraphs in the Particulars of Objections (Amendment No 2), I can only say that these draw the reader's attention onto two areas: *first*, that the defendant's NExBTL products in its entirety anticipated the Plaintiff's Patents; and *second*, the particular relevance of the background art stated in the SE 149 patent to the validity challenge. The reader is not given any hint that the experimentation results of tests conducted on the output of the process described in the SE 149 patent is what the defendant was truly seeking under the summons.

45 The plaintiff's representative Lynn Tomlinson had deposed on affidavit dated 6 March 2014 that "the Plaintiff has never obtained a sample of or tested the Defendant's NExBTL product." This is the unambiguous answer to the defendant's request as *expressly* prayed for and hence the prayer should be dismissed.

46 The defendant's representative Heikki Jalmari Sasi averred (in his affidavit dated 30 January

2014) that the process outlined in the SE 149 patent forms one of the core processes used by the defendant to make NExBTL products. The defendant did not offer any evidence about what other processes are involved. I am therefore unable to make any form of assessment as to the significance of the process taught by the SE 149 patent in the production of the defendant's NExBTL product. Accordingly, I am not prepared to treat the output of the SE 149 patent to be equivalent to the defendant's NExBTL product. Hence, I am not prepared to treat a prayer for the disclosure of experimentation results of tests on the NExBTL product as an *implied* request for the experimentation results of tests on the output of the SE 149 patent.

From tests conducted on the US 722 patent

47 As for the prayer for experimentation results obtained by the plaintiff in its tests conducted in accordance to the instructions taught by the US 722 patent, the reason for its dismissal is a pleading point. The plaintiff does not dispute that experiments were conducted but took objections to disclosure on two grounds. First, these were private experiments the results from which were not publicly available and therefore does not comprise any part of the prior art. Second, the defendant had failed to plead that the output or experimental data from tests conducted in accordance to the US 722 patent anticipates the plaintiff's invention. A perusal of the Defence and Counterclaim as well as the Particulars of Objections (Amendment No 2) buttresses the plaintiff's point: the US 722 patent is not cited as prior art in either of these pleadings. Since the US 722 patent is not pleaded as an article of prior art, the plaintiff cannot be expected to know that it will be relied on or *a fortiori* how it will be relied on. On this latter ground alone, the defendant's prayer for experimentation results from the US 722 patent should be dismissed; and I did so order.

48 I should add that having heard lengthy submissions on this issue, I could not understand why, if the defendant's case is that the US 722 patent anticipates the plaintiff's patent, the defendant cannot simply conduct the experiments themselves. During submissions, the defendant submitted that if one were to follow the instructions of the US 722 patent, the output of that process will be at least 75 wt % of even-carbon paraffins, and that this discloses the plaintiff's invention. Both parties have access to the US 722 patent. I have not heard any submissions that the defendant is unable to or incapable of conducting experiments in accordance to the instructions set forth in the US 722 patent. On the contrary, the plaintiff's representative Lynn Tomlinson suspects that "the defendant itself has already extensively reproduced the process and products from [the US 722 patent]" (*vide* his affidavit dated 21 April 2014). I would have thought that the defendant, if it chooses to make its case that the output of the process described in the US 722 patent anticipates the plaintiff's invention, can simply arrange for the experiment to be conducted pursuant to a notice of experiment served in accordance with Order 87A, rule 6. Should the defendant do so, then I should think that the plaintiff would be obliged to disclose its experimentation results, whether these be from experiments conducted pursuant to the procedure under Order 87A, rule 6 or experiments that it had conducted prior to the commencement of proceedings and which have now been made relevant and discoverable by virtue of the defendant's experiments and disclosure. I make this observation on the assumption that the defendant had properly cited the US 722 patent as an article of prior art and duly pleaded its case. However, I should state that since this point was not argued before me, I have not based my decision to dismiss this prayer on this line of reasoning.

Conclusion

49 For the reasons stated in these detailed grounds, I dismissed the defendant's applications without prejudice to them applying afresh at a subsequent stage in these proceedings. I should expect parties to sharpen the issues pertaining to the challenges to validity of the Plaintiff's patents as this case meanders towards a trial on liability. The defendant can reconsider the relevance of

inventor's notes and make a renewed request when there have been sufficient changes in the circumstances to warrant a reconsideration of this issue: see *Recordtv Pte Ltd v MediaCorp TV Singapore Pte Ltd and others* [2009] 4 SLR(R) 43; [2009] SGHC 146, at [28], *et seq.*

50 Likewise, the defendant should reconsider its pleadings in light of the observations made hereinbefore in relation to the application for discovery of experimentation results. Once the pleadings are appropriately amended such that the relevance of the SE 149 patent and the US 722 patent are pleaded with sufficient particularity, the discovery of the experimentation results from tests conducted by the plaintiff prior to the commencement of these proceedings can be revisited. Finally, the defendant should consider whether the notice of experiment procedure may be the more appropriate means of proving its case that the SE 149 patent and the US 722 patent anticipates the Plaintiff's Patents.

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