

^{6th} November 2007

PATENTS ACT 1977

BETWEEN

Ingenico (UK) Limited

Claimant

and

Pendawell 2007 Limited

Defendant

PROCEEDINGS

Application under section 72 for revocation of Patent No GB2360867B

HEARING OFFICER

P Back

DECISION

Background

- An application for revocation of UK patent number GB 2360867B ("the patent") in the name of Newt Plc was made by Ingenico (UK) Limited ("the Claimant") on 23 June 2004. Prior to the date of the hearing, the patent was assigned to Pendawell Ltd, who took on the role of Defendant at that time.
- The patent was filed on 11 July 2001, claiming a priority date of 11 July 2000, and was granted on 25 June 2002. The claims relate to an electronic payment method and the Claimant alleges that they are excluded from patentability as not being an invention, are not novel, and lack an inventive step.
- The claimant's case alleging lack of novelty is based on a single document, US 5933812 ("Meyer"). Its case alleging lack of inventive step is based on this document and separately on the basis of common general knowledge. The defendant denies all the allegations.
- The evidence rounds did not proceed entirely smoothly, and this application was the subject of two preliminary decisions relating to the filing of evidence (O/022/06 and O/113/07). The case finally came before me at a hearing from 30

April to 4 May 2007.

Mr Douglas Campbell, instructed by Murgitroyd and Co, appeared for the claimant, and Mr Giles Fernando, instructed by David Keltie Associates, appeared for the defendant.

The Issues

The vast bulk of the hearing was taken up with cross-examination of the witnesses on matters which primarily related to the questions of novelty and inventive step, and in deference to this I will consider these matters first.

Assessment of the Witnesses

- Performed I go into the details of the law and its application in this case, I think it would be appropriate for me to make some comment on my impression of the witnesses.
- The claimant called two witnesses: Mr Green and Mr Steele. The defendant also called two: Mrs Penn and Mr O'Donnell. The defendant originally intended to call a third witness, Mr Nielsen, who is named as an inventor on the patent, but in the event they did not do so and as a result I have not relied on his written evidence.
- 9 Mr Green, an independent electronic financial transactions consultant, was the claimants' primary witness and gave evidence as to his view of the skilled person and whether such a person would have found the invention obvious. He was a generally careful witness, if somewhat defensive at times, and I believe he told the truth as he saw it.
- Mr Steele, a consultant engineer who has worked for Ingenico for a number of years, was put forward by the claimant as giving evidence on Ingenico's thinking at the priority date of the patent to illustrate the general industry position. He was clearly somewhat unnerved at the experience of giving evidence but maintained his position under vigorous questioning. I found him a truthful witness, however, as I shall explain below, I do not think his evidence shows what he believed it to show.
- 11 Mrs Penn was the first expert witness for the defendants. She is an independent consultant with experience in the use and development of electronic payment systems. She gave her answers perhaps a little too carefully, showing a tendency to automatically disagree with where she perceived Mr Campbell to be coming from. This has led me to treat her evidence with some caution, however, I do not believe that she was at any point untruthful, merely somewhat obstructive.
- Mrs Penn was extensively cross-examined on her experience and Mr Campbell questioned the level of her experience of the hospitality industry. What I drew from her responses is that she has experience in the area of acquisition of such things as point-of-sale terminals, although her experience in the hospitality area was largely post the priority date of the patent. Be that as it may, she appeared to demonstrate a convincing understanding of how the industry operated at that

date.

Mr O'Donnell was the defendant's second witness. With Mr Nielson, he is named on the patent as co-inventor. He is clearly the "technical" half of the team, and displayed a clear knowledge of the operation of card payment systems. As a witness, he had a tendency to try to avoid conceding points - in particular, avoiding giving yes or no answers, and often failing to acknowledge that he was in fact agreeing with the point put to him - although on occasion this may have been due to the way the question was phrased. His opinions were also doubtless coloured by the fact that he is an inventor of the invention in question, but I found his answers to be honest if occasionally obscure.

The law

- The Comptroller's powers to revoke a patent on the application of another person are set out in section 72(1). With respect to the validity of the claims, the relevant parts read as follows:
 - 72.-(1) Subject to the following provisions of this Act, the court or the comptroller may by order revoke a patent for an invention on the application of any person (including the proprietor of the patent) on (but only on) any of the following grounds, that is to say (a) the invention is not a patentable invention; (b) ...
- Further to section 72(a) above, I must also look to section 1(1) which defines the requirements for a patentable invention, namely that:
 - 1.-(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –
 - (a) the invention is new;
 - (b) it involves an inventive step;
 - (c) ...
 - (d) the grant of a patent for it is not excluded by subsections (2) and (3) below;

and references in this Act to a patentable invention shall be construed accordingly.

- (2) It is hereby declared that the following (among other things) are not inventions for the purposes of this act, that is to say, anything which consists of –
- (a) ...
- (b) ...
- (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;

but the forgoing provision shall prevent anything from being treated as an invention for the purposes of this Act only to the extent that a patent or application for a patent relates to that thing as such.

- 16 Also relevant are sections 2 and 3:
 - 2.-(1) An invention shall be taken to be new if it does not form part of the state of the art. (2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.

. . .

3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above...

The invention

- As mentioned above, the invention relates to an electronic payment method. In times past, credit card transactions were conducted using what the witnesses in this case refered to as "ZIPZAP" machines. I was previously unaware of this terminology, but it eloquently catches the nature of these devices, which had a bar which ran back and forth over the customer's card, pressing down carbon paper and leaving an imprint of the card's details. By the priority date of the patent, these devices were falling out of use and being replaced by electronic systems which enabled automatic payment authorization over telecoms lines.
- There were several different protocols extant in 2000, in particular various forms of the APACS (Association for Payment Clearing Services) standards. Of particular relevance to this case are APACS 30/50 and APACS 40.
- In the APACS 30/50 system, authorization and payment requests are separate. When the customer presents their card, an authorization request is made to their bank, essentially as to whether they have sufficient credit or money in their account. If they have, the transaction is authorized, and the amount specified is reserved to pay it, preventing repeatedly making small payments and in total exceeding the credit limit. However, no payment actually occurs at that time. Instead, later in the day, typically overnight, the bank dials up the merchants, all the transactions are downloaded and payment made, in terms of money being deducted from the accounts; this process is known as "polling". There is a degree of tolerance allowing the actual amount debited to vary slightly from the amount authorized.
- In the APACS 40 system, by contrast, there is only one online request payment and authorization are simultaneous. By its very nature, there can be no variation in the amount authorized and the amount actually debited.
- The use of a polling protocol such as APACS 30/50, with its built-in allowance for variation between authorization and payment, had advantages in, for example, the hospitality sector, where there is great use of gratuities. The tolerance meant that an authorization request could be made for the basic cost, such as the price of a meal, and then the customer could be asked if they wished to add a gratuity. If they did, this additional sum could be added in when final settlement was made at the end of the day without difficulty.
- Turning now to the patent, the only claim discussed at the hearing was claim 1, and it appears to be accepted by all that the patent will stand or fall with this claim. The claim is as follows, with additional labelling inserted helpfully by Mr Campbell, which I will use to refer to the integers of the claim:
 - (a) a method of generating and handling an electronic online (as hereinbefore described) authorization and uploading request relating to a payment transaction, the method comprising:
 - (b) receiving data relating to a customer's transaction card, and data relating

to an original amount of the payment transaction;

- (c) presenting the original amount data to the customer such that a gratuity amount can be determined an in response thereto receiving data relating to the gratuity amount;
- (d) constructing the electronic online authorization and uploading request, the request comprising all transaction data necessary for an acquirer to authorize the transaction and to completely upload the payment transaction for subsequent settlement, and including the transaction card data and data relating to a value of the transaction, the transaction value comprising the gratuity amount and the original amount;
- (e) establishing a link with the acquirer via a telecommunications network and seeking online authorization for the payment transaction by transmitting the constructed request; and
- (f) generating and providing receipt data to the customer, the receipt data confirming authorization of the payment transaction at the transaction value when an electronic signal has been received specifying that the electronic online authorization and uploading request has been authorized.
- The phrase "as hereinbefore described" relates back to page 1 lines 9-10 which state "by online, it is meant requesting authorization of a payment transaction in real time whilst a customer is waiting".
- In other words, this is a method of conducting a payment transaction online in which data from the customers' card is taken, the customer is asked for a gratuity amount, authorization is then sought electronically for the total cost plus gratuity together with all the information needed for final settlement, and a receipt is provided. In essence, the claim is to using a simultaneous authorization-and-payment system (such as APACS 40) in a situation where a customer may add a gratuity.

Inventiveness in light of common general knowledge

- The claimant asserts that the invention is obvious in view of common general knowledge at the priority date of the invention and it is convenient to deal with this point first.
- Both sides made reference to the test set out in the well known case of Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd [1985] RPC 59, in which the Court of Appeal formulated a four-step approach, namely:
 - (i) identify the inventive concept embodied in the patent;
 - (ii) impute to a normally skilled but unimaginative addressee what was common general knowledge in the art at the priority date;
 - (iii) identify the differences if any between the matter cited and the alleged invention:
 - (iv) decide whether those differences, viewed without any knowledge of the alleged invention, constituted steps which would have been obvious to the skilled man or whether they required any degree of invention.

I adopt this approach below. I should note that subsequent to the hearing the Court of Appeal decision in *Pozzoli Spa v BDMO SA & Anor [2007] EWCA Civ 588* ("Pozzoli") was handed down. In this decision the court reformulated the Windsurfing test and the parties to this dispute were given the opportunity to make further submissions to take account of this judgment. Both parties made further submissions and both parties expressed the view that the Pozzoli decision makes no difference to the result of this dispute. Given the parties agreement on this point I do not think I need to go into the detail of their submissions other than to say that I accept their position

Step 1: identify the inventive concept

- The claimant quotes the patent page 6, lines 7-9 "simply... determining the total amount [including the gratuity amount] that is to be paid electronically prior to obtaining authorisation for a transaction from an enquirer" and asserts that this is the inventive concept.
- However, I do not think this is the whole story. There is also the matter of why this is done and what the claimed invention does with it. The point is that because this information is determined in advance, it is then possible to use a simultaneous authorisation-and-capture system (such as APACS 40) to conduct the transaction. Mr Campbell implicitly acknowledged this in his closing argument by saying in relation to this objection "it boils down to gratuities plus APACS 40". I therefore consider that the inventive concept needs also to include "..and processing authorisation and remote capture at the same time."

Step 2: impute common general knowledge to the skilled addressee

- It is acknowledged by both sides that the skilled person (whoever they may be) would have familiarity with both APACS 30/50 type systems and APACS 40 systems.
- There was significant dispute between the two parties as to the identity of the skilled person, and Mr Green, Mr O'Donnell and Mrs Penn opined on this issue. Indeed, the subject of my previous preliminary decision was whether the defendant should have a further opportunity to address some statements made by Mr Green on this subject in the claimants evidence in reply.
- The claimants contend that the skilled person must be someone from the card payment industry who is experienced in both the business and technical aspects relating to credit card processing systems and who has an appreciation of the hospitality industry. They and Mr Green consider the patent to be primarily directed to the terminal vendor, and do not believe that the acquirer should be considered part of the "skilled addressee team".
- The defendant, by contrast, considers the skilled addressee to be an ordinary, unimaginative member of the team within a banking institution or acquirer that devises and procures schemes for Electronic Fiscal Transaction at Point Of Sale ("EFTPOS"). They argue that the patent is not concerned with the manufacture of a terminal rather it is directed at a handling process and is aimed at a far higher, functional level than the nuts and bots of manufacture of a product to be

used in the implementation of the invention.

In my opinion, the defendants must be right. There is no dispute that there are any real technical issues in putting the claimed invention into effect – using the known APACS 40 system will work. Indeed, as the claimants rightly point out, if there were this would raise questions of sufficiency of the patent. The patent is not about that. It is about how a merchant, particularly in the hospitality industry, uses an electronic payment system. The skilled person is therefore the user of payment systems, not their creator.

Step 3: identify the differences

The difference between Meyer and the common general knowledge is, as the claimants argue "APACS 40 plus gratuity", i.e. the use of the known APACS 40 system to process the total amount to be paid, including the gratuity. The defendants do not appear to contest this.

Step 4: decide if the differences constitute obvious steps

- The claimant argues that the use of the APACS 40 system in this way presented no technical challenges and was an obvious thing to do. The defendants argued that there was a strong prejudice in the industry which meant that the skilled person would not have thought of using APACS 40 in this context. They further argued that even if someone overcame the industry prejudice, they would not necessarily arrive at the invention of the patent. Both sides relied on their expert witnesses to provide evidence to back their contentions.
- Mr Green consistently maintained in cross-examination that the skilled person would have found the invention obvious. However, his contention was based on a view of the skilled man that I have held above to be incorrect. When invited by Mr Fernando to opine on whether the invention would have appeared obvious to the alternative skilled person proposed by the defendant, he consistently refused to do so he believed himself to represent the appropriate skilled person and could not put himself in others' shoes: (Day 1 page 92 lines 7-9):

"Q Let me just be clear about this. The only exercise you had performed was working out whether it was obvious to you?

A It is the only thing I can honestly answer on."

- Mr Steele also asserted that the patent was obvious, and in support of this he refered to discussions he was aware of within Ingenico which took place just before the priority date of the patent in which a scheme which would implement the patented invention was considered. He maintained this position under aggressive cross-examination, which on redirect led to the production, with great flourish, of an email printout supporting this. After some discussion, Mr Fernando consented to this being introduced as evidence.
- The email, which appears to be between two Ingenico developers just prior to the priority date of the patent, suggests how APACS 40 could be used in a gratuities system. In essence, it proposes that a "pre-authorisation " step is done initially to cover the cost without gratuity. The customer is then asked if they want to add a

gratuity. A whole new APACS 40 transaction is then raised to cover the final total cost. The email notes that it is not clear if anyone has tried anything like this, or if it would work properly.

- 40 Although, if one ignores the initial pre-authorisation step this would, if disclosed publicly, have anticipated the invention, it does so in rather clumsy manner. The key to the patented invention is that there is no need for such a pre-authorisation step. With such a step, the invention becomes pointless as the advantages of less back-and-forth etc. are lost. I would expect the skilled person to immediately reject such an approach. It therefore does not help the claimant on obviousness
- Moreover, it seems to me to assist the defendant's case because it is hard for the claimant to argue that it was obvious to do things the way they are done in the patent when on its own evidence, this did not occur to its own engineers at the time, when they were actively seeking such a solution.
- 42 Mrs Penn consistently maintained that the claimed invention was inventive. Her position is best summarised in these extracts from her cross-examination, page 279 line 16 to page 280 line 14, and page 281 line 18 to page 282 line 5:
 - "Q... I am asking you to assume we are in a restaurant environment, EFTPOS terminal is located away from the table, the customer is going to pay by card, and Mr Green says you have only three options then. That is the scenario: The waiter is either going to say to the customer 'do you want to add a tip,' before he goes off to the terminal in the first place, or he does something even worse, he goes to the terminal, runs it halfway through and leaves it open on the terminal while he goes back to the customer, which is even sillier, I think, or the third idea is that he makes two transactions, the first trip to the terminal when he runs the original amount through APACS 40, then he comes back to the customer, gets his tip, and runs it through the second transaction. Mr Green has said these are the only three ways you can do it on this scenario. Do you agree with that?
 - A. Correct. That is correct.
 - Q. Mr Green has also said that none of these options would be acceptable to the trade. That is correct too?
 - A. Correct. That is correct."
 - "A. I do not think what Newt did is actually trivial because what Newt did is they changed the whole process, they looked at exactly what Mr Green has said here in 14, they followed exactly what he said, and they changed things around in such a way that they made it possible that the waiter did not have to ask you before you decide how you are going to pay, 'Do you want to tip' Newt does not leave the terminal wide open for a period of time, bearing in mind our window constraint, and that is what Newt does...They found a solution"
- From this I take Mrs Penn to be saying that there were perfectly rational business reasons (not leaving the terminal open, not standing over a customer) why APACS 40-type systems were inappropriate for gratuity handling, rather than an "irrational mindset". What she is saying the patent did was to show that these business reasons are not in fact an impediment to using APACS 40 if you do it in the way the patent has done. Her evidence on this point was consistent and clear.
- 44 Mrs Penn also put forward advantages to using APACS 40 over 30/50 which would have been motivation for the industry to use APACS 40 if it thought it

possible. These primarily related to problems with polling and potential fraud. Regarding polling problems, she refered to difficulties that would occur if the end-of-day polling failed for some reason. She linked this with fraud, suggesting waiters might sabotage the process to hide anomalies. Another fraud she referred to was waiters changing the total amount (using APACS 30/50 tolerances) to bump up the bill after a customer had left. Her evidence on this was weakened by her refusal, when presented with the documents Mr O'Donnell had found on double-charging for service (to which I refer below), to acknowledge this was a different kind of fraud.

Mr O'Donnell conceded that once the idea of the invention was had, its implementation was not difficult; under cross-examination (page 388 lines 5-14) he said:

"The end result, looking in hindsight, is very straightforward. Getting to that end result is certainly not straightforward. What we had to do was swap the processes of getting the authorisation and the gratuity, so it is a completely different mindset. I would definitely not say it was trivial to arrive at the solution because it took a lot of time before we said 'Hey, can we actually do this?' But then, yes, I accept, once you put it in front of somebody and said, 'This is the way it can work', 'Really?', that is how it came about and that is what we did."

- On the advantages of the invention, Mr O'Donnell focused on polling difficulties and cost, as had Mrs Penn. He doubted, however, that polling difficulties were caused by deliberate fraud, and under cross-examination conceded that cost was influenced by many factors, not just choice of protocol, but also how it was used (e.g. is authorisation sought for every transaction). His evidence on fraud suffered a few problems in that documents he had presented to make his argument related to "double charging" for service. This is where a restaurant charges a service charge, but also leaves space for a tip, luring customers into giving one although service is already included in their bill. Such a fraud, however widespread, is not relevant to the invention, as it is slight of hand with presentation of the bill, not an exploitation of the transaction protocol. As a result, his evidence on fraud was somewhat undermined.
- 47 Ultimately, it appears that the witnesses with a technical background, Mr Green, Mr Steel, and Mr O'Donnell were agreed that the invention was straightforward to implement once one had decided to use the claimed method. This is unsurprising; as I noted above, there is little technical disclosure in the patent and it would raise questions of sufficiency if the method were difficult to implement on the known technology.
- Furthermore, although Mrs Penn and Mr O'Donnell's evidence was notably weak and confused in places on this point, it seems clear to me that there are advantages to using the invention in terms of avoiding polling and preventing some forms of fraud. Whether these advantages would always be determinative for a merchant, I have some doubt, but I think it is clear that some merchants would have wanted to adopt it at the priority date. My view on this is reinforced by the Ingenico internal email, which shows that the claimants were themselves motivated to find some way to use an APACS 40 type system in this way.
- The key question therefore seems to me to be: Would it have been obvious to the skilled person to use the claimed method? Here, it seems to me that my previous

finding on the identity of the skilled person is key. Mr Green and Mr Steel both approached the problem from the technical side – i.e. is it straightforward to implement the method using the well-known APACS 40 system? Mrs Penn on the other hand approached it from the point of view of someone in the hospitality industry, and how they would think of using a card-payment system.

- Mr Fernando for the defendants made several arguments as to how there was a mindset against using APACS 40 in the hospitality industry because of a perceived inability to use it with gratuities. Mr Campbell, backed by Mr Green's evidence, challenged these as "straws" and came up with a number of plausible hypotheses as to why APACS 40 may not have been used for unrelated reasons in the past in particular, resistance to standing over a customer while they decide on a tip which changing circumstances such as the introduction of Chip and PIN had overcome.
- Ultimately, this case can be argued in the abstract either way. It all comes down to the evidence backing each argument. In the end, I prefer the evidence of Mrs Penn. She was the only witness with real experience from the users' point of view, and it is this view which seems to me to be crucial in view of my findings on the identity of the skilled person. Despite strong cross-examination, her evidence on this point was unshaken to people in the hospitality industry, using a combined authorize and pay system would not have occurred. This is in my view fortified by the email exhibited during Mr Steel's evidence, as I note above.
- Therefore I hold that it would not have been obvious to the relevant skilled person to try such a system, and the obviousness attack based on common general knowledge fails.

Novelty

- The claimant has based its novelty attack on Meyer, as noted above, which is a US patent document relating to transaction processing. It was published on August 3 1999 and so is clearly prior art regarding the patent.
- Meyer discloses a portable terminal which is said to be "adapted for use in eating and drinking establishments". Notably (column 3 lines 56-60), it includes a function to prompt a guest to enter a tip and present them with a revised total accordingly.
- The difference between the claimant and the defendant on this issue appeared to be primarily whether integer (d) of the claim above was satisfied.
- The claimants argue that the only question is what Meyer means by "complete the debit transaction" at column 9 line 43 is the transaction data captured by the host at the same time as the transaction is authorised? They argue that this means that quite simply, the transaction is completed there is no subsequent polling. They argue this is reinforced by reference to an ATM card (which Mr Green and Mr O'Donnell agreed was the US term for debit card) and PIN, which means there must be a debit from the bank account.
- 57 The defendants counter that Meyer is concerned only with the construction of the

- remote terminal and is silent on the actual protocol used it could just as well be used with a polling protocol.
- The Claimants rejoin that even if Meyer is read to potentially refer to either authorisation only, or authorisation and capture, the latter is more likely and this is sufficient to anticipate. They refer to *Inhale Therapeutic Systems Inc v Quadrant Healthcare Plc* [2002] RPC 21 where Laddie J draws a distinction between a disclosure of the patented invention itself and a disclosure of an invention which, if performed would necessarily infringe the patented invention. In *Synthon BV v Smithkline Beecham* [2005] UKHL 59 Lord Hoffman said that they were both aspects of a single principle, namely that anticipation requires prior disclosure of subject-matter which, when performed, must necessarily infringe the patented invention.
- I think the claimant's argument here is without foundation. Meyer clearly lacks any instructions or suggestion that authorisation and capture should be used. It is true that such a protocol could be used with Meyer, but there is no need to do so and so there is no inevitable infringement of the present claim 1 by performing Meyer. As such, Meyer fails to disclose an essential integer of the invention (i.e. (d)) and the novelty attack must fail.

Inventiveness in light of Meyer

As an alternative to their argument on novelty, Ingenico also argued that the patent is obvious in light of Meyer and the common general knowledge of the skilled person. Applying the Windsurfing steps in turn:

Step 1: identify the inventive concept

As I have stated above, I consider the inventive concept to be "determining the total amount [including the gratuity amount] that is to be paid electronically prior to obtaining authorisation for a transaction from an enquirer and processing authorisation and remote capture at the same time."

Step 2: impute common general knowledge to the skilled addressee

It is acknowledged by both sides that the skilled person would have familiarity with both APACS 30/50 type systems and APACS 40 systems. The parties differed on the nature of the skilled person, but that does not affect this point.

Step 3: identify the differences

The difference between Meyer and the inventive concept is thus, as can be seen from the novelty discussion, the processing of authorisation and remote capture at the same time.

Step 4: decide if the differences constitute obvious steps

The claimant argues that Meyer could be used with an APACS 40 system. The defendant disputes this, asserting that if it had been obvious to combine an electronic ZIPZAP machine with APACS 40, then someone would have done so. They argue, backed by the opinion of Mr O'Donnell, that Meyer could not be used

in the UK without modification of the standards. The claimants rejoin that these issues are the kind that the skilled person in the card terminal industry grapples with as a matter of routine. In this they rely on the opinion of Mr Green.

- It seems to me that the claimant is right on this last point. Someone looking for an electronic terminal could take Meyer and adapt it for use in an APACS 40 system if this were wanted. Meyer is not concerned with protocols and clearly has general application. However, this leaves the question of whether the skilled person would think of doing so.
- The claimant suggests that the question is not "why would the skilled addressee think of using APACS 40 (or equivalent)?" but rather "why wouldn't he?". They point out that doing so would provide all the benefits provided by the patented invention.
- The defendant, however, argues that Meyer is really irrelevant to the inventive step of the patented invention. Meyer is concerned only with an electronic terminal, not with how it is used.
- I consider that the defendants are right in this matter. Meyer really gives the skilled person nothing more than a hand-held terminal into which gratuities can be entered. There is no suggestion in Meyer that one should change one's existing protocol. As the claimant appears to agree with the defendant that pre-existing systems for handling gratuities used APACS 30/50 (or similar), I do not see that Meyer gives the skilled man any pointer to moving away from this.
- As such, I do not consider that Meyer adds anything to the common general knowledge to suggest that the invention as claimed in the patent lacks an inventive step. It is concerned with a different aspect of the transaction processing operation and is the wrong starting point for an obviousness attack.
- 70 I reject this line of attack on the patent's validity.

Excluded matter

- The claimant and defendant agreed that the leading case in this area is *Aerotel Ltd v Telco Holdings Ltd (and Others) and Macrossan's Application [2006] EWCA Civ 1371.* In this case the Court reviewed the case law on the interpretation of Section 1(2) and approved a new four-step test for the assessment of patentability:
 - 1) Properly construe the Claim;
 - 2) Identify the actual contribution;
 - 3) Ask whether it falls solely within the excluded matter;
 - 4) Check whether the contribution is actually technical in nature.
- As stated at paragraphs 45 47 of the judgment, reconciling the new test with the earlier judgments of the Court of Appeal in *Merrill Lynch* [1989] RPC 561 and *Fujitsu* [1997] RPC 608, the fourth step of checking whether the contribution is

technical may not be necessary because the third step – asking whether the contribution is solely of excluded matter – should have covered the point. If a claim fails the third step, it cannot be "revived" by the fourth.

73 Applying each of these four steps in turn:

Step 1: Construe the claim

I have construed the claim above: this is a method of conducting a payment transaction online in which data from the customers' card is taken, the customer is asked for a gratuity amount, authorization is then sought electronically for the total cost plus gratuity together with all the information needed for final settlement, and a receipt is provided.

Step 2: Identify the actual contribution

- The claimant characterises the contribution as "allowing existing on-line authorisation and uploading requests to contain a gratuity in their amount." The defendant argues that there has been a change to the sequence of steps in capturing the data and initiating communication.
- However, there does not appear to be any change to the communications protocol. As I found above in my consideration of inventive step, the invention can perfectly well be performed by using the existing APACS 40 system. I therefore consider the claimants characterisation of the contribution to be correct: as I noted above, this is a (I have found, new and inventive) method of receiving payment instructions using an existing protocol which will allow inclusion of a gratuity in a system which authorises and uploads payment requests at the same time.

Step 3: Ask whether it falls solely within the excluded subject matter

- The claimant argues this is clearly the case: the contribution as they have characterised it involves no technical changes whatsoever. It is a method of handling credit card transactions involving gratuities, which is a method for doing business as such. It is also a computer program since it is implemented on software running on otherwise conventional hardware.
- The defendant by contrast argues that the differences do not lie solely in a computer program, and it is not a business method. Mr Fernando argued that it is not computerization of an existing process the benefit is from altering the sequence of steps, not computerization. He thus distinguished it from the previous case of *Fujitsu's Application* [1997] RPC 608, and compared it to the European Patent Office decision in *Vicom* [1987] 2 EPOR 74 and the High Court judgment in *Research in Motion*. He argued that these cases showed that a change in the algorithm to be implemented by the computer program is a relevant technical contribution thus, not solely a computer program. He likewise dismissed the business method objection, arguing the patent was different from *Macrossan* in that it is not attempting to monopolise a way of trading, only an improved electronic handling of gratuities comparable to patenting a cash register.

- In their counterstatement the defendants specifically put forward four features which they aver show the invention goes beyond the exclusions. Paraphrased, these are:
 - a. enabling gratuities to be paid by card at the same time as the principal sum is processed at a point-of-sale (POS) terminal.
 - b. avoiding the need for polling of the POS terminal.
 - c. opportunity for retail fraud is reduced.
 - d. avoidance of polling failure.
- The defendant characterizes these as "technical features". However, while they may be advantages of the invention, they are not achieved by technical means which is standard. They are achieved by changing the business process i.e. changing the sequence of steps in which the terminals are used. The claim is to how a business uses a known system. In Mr Fernando's analogy, it is not the cash register which is being claimed, but the way in which it is used.
- The contribution falls squarely within the business method exclusion. It also falls within the computer program exclusion given its implementation by means of a computer program.

Step 4: check whether the contribution is technical in nature

- The claimant asserts that this step makes no difference and I agree: having determined the claim is excluded in step 3 above, this step cannot save it.
- I therefore find claim 1 excluded from patentability by section 1(2) of the Patents Act 1977. No argument was made on the dependent claims for avoiding exclusion if claim 1 was excluded, and I also hold them excluded from patentability.

Conclusion and order

- After consideration of the evidence and for the reasons set out above, I hold that all the claims of the patent are excluded from patentability. I therefore order the patent to be revoked in accordance with Section 72(1) of the Patents Act 1977.
- I also find that the attacks on the validity of the patent based on novelty and inventive step fail.

Costs

Both parties indicated they were content for costs to be awarded on the usual scale. The claimants have succeeded in their application and I therefore award them £2800 in accordance with the Comptroller's standard scale.

Appeal

87 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal

must be lodged within 28 days.

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Divisional Director acting for the Comptroller