

OPINION UNDER SECTION 74A

Patent	GB 2391101 B
Proprietor(s)	TickeToGo Ltd.
Exclusive Licensee	List of licencees can be found at: https://www.ipo.gov.uk/p-ipsu/Case/PublicationNumber/GB2391101
Requester	Corethree Ltd.
Observer(s)	TickeToGo Ltd. Fox Williams GLL
Date Opinion issued	08 March 2016

The Request

1. Corethree Ltd haave requested an opinion on whether GB 2391101 B, the Patent, is valid in respect of five items of prior art, and whether a system as described in their request would directly, or indirectly infringe of the Patent. The request notes that there is an appeal awaited in The Big Bus Company Ltd v TickeToGo Ltd [2015] EWHC 1094 (Pat), which relates to the Patent.

The Observations

2. Observations have been filed by Slingsby Partners (on behalf of TickeToGo Ltd.), Fox Williams (on behalf of First/Keolis Transpennine Limited, First Capital Connect Limited, FirstScotrail Limited and First Great Western Limited) and Greenwich Leisure Ltd. Greenwich Leisure Ltd's observations do not include any comments on the substance of the request. TickeToGo have also provided observations in reply to Fox Williams observations.
3. Corethree have provided observations in reply.

Matters to be considered by this Opinion

4. Fox Williams' observations include a further seven patent documents and five further documents, which they suggest may be relevant to the question of validity. They also suggest that I should find that the patent relates to non-patentable subject matter under Section 1(2)(d)). Rule 96 which governs the filing of observations, notes that observations should be directed to issues "raised by the request". As such I do not

believe it is appropriate for me to consider in this opinion the further prior art and the new question of non-patentable subject matter put forward by Fox William. It follows that I will also not consider any other observations made on the observations of Fox Williams. If Fox Williams wishes to have an opinion on those questions then they are free to file a further request.

5. Before I turn to any of the questions of substance here, there are a few things that I must first address. First, I should set out my understanding of the position in *The Big Bus Company Ltd v Ticketogo Ltd* [2015] EWHC 1094 (Pat). The requester suggests that this case does not raise relevant issues, and I note that this is not disputed by TicketToGO Ltd. Indeed having briefly looked at the decision in the High Court, it seems to me that there are no issues relating to infringement and construction of the claims per se, nor to the question of validity.
6. Secondly, TicketToGo suggest that I should consider the request to be frivolous or vexatious and/or that I should find that it is not sufficient for me to form a sensible opinion. Whilst I might have some sympathy for an argument that an opinion request did not set out a case as fully as it might, I think I must also be mindful that the purpose of the opinion service is to provide a low cost method to provide an opinion. If I have reservations about what is provided, of course I shall need to say so, but my objective should be to try to come to a sensible opinion. I do not therefore believe that this request can be said to be wholly insufficient, nor entirely frivolous. I do not therefore see any reason to refuse the request, for what is a non-binding Opinion.
7. However, underneath this, there are a couple of more specific points made about the documentation provided – specifically that WO 00/074300 was considered during the prosecution of the patent, and that there is no substantiated publication date for the Alaska Airlines Ticketing System in their Annual Report, nor some further reports from the internet (Exhibits 3-6).
8. On WO 00/074300 the relevant provision is Section 74A(3)(b) which provides that the Comptroller shall not issue an opinion “if for any reason he considers it inappropriate to do so.” This provision has been relied on previously to refuse to give opinions on questions involving certain prior art considered during the examination of the patent. In this respect the Opinions manual¹ notes two previous opinions: one where documents cited X,Y had been argued during proceedings, which was felt to repeat arguments already considered; and one where A citations not argued, were considered in the opinion. WO00/074300 is listed as prior art on page 2 of the patent as filed. I note that neither the examination reports in the national phase, nor the International Preliminary Examination Report raised argument based on this document. I therefore think in this instance it is appropriate to consider this document.
9. *I turn now to the question of a publication date for the Alaska Airlines and internet documents.*
10. The particular documents in question are the Annual Report of Alaska Airlines 2000, a Business Wire press release dated 16 September 1999, and three publications from the International New York times, dated 29 September 1999, 8 May 2000 and

¹ available at: <https://www.gov.uk/government/publications/opinions-manual>

24 February 2000. In effect, the question before me is, on the balance of probabilities, would the document have been available at the time suggested by the dates on these documents. TickeToGo have provided no substantive evidence to doubt the dates listed above. I therefore believe it is clear that the dated publications are likely to have been available and I shall consider them.

11. As for the Annual Report, my task is somewhat harder. TickeToGo notes that there are a number of different dates in the document, a chairman's letter dated 12 March 2001, an accountant's sign off dated 25 January 2001, and an annual meeting, at which one assumes the report was intended to be discussed of 15 May 2001.
12. Corethree contend that there are two other factors to consider. First, Corethree in their observations in reply, point to metadata which suggests the document was created on 17 March 2001 and last changed on 30 March 2001. Secondly, Corethree suggest that there is a legal requirement in the United States to deposit such a report within 90 days of the calendar year end. All these circumstances might point to a publication date before the priority date of the application. These are of course also the sorts of things that would I suspect come out in the wash of fully litigated court proceedings. I note however, that the extent of the disclosure that we are talking about in the Annual report is not exhaustive, the passage on page 5 in question is two sentences long, and reads:

"In 1999, we became the first carrier in the world to let you check in via the internet, using your home or office computer to print your own boarding pass. Earlier this year we did it one better, with another world first: wireless check-in, available through an array of web-enabled phones and handheld personal digital assistants."

13. Corethree in their observations in reply, suggest that this discussion lead them to question the priority of the current application; adding a further complication.
14. For the purposes of this opinion I shall take the following approach, I shall first consider whether this disclosure is sufficient to question the validity of the patent, and if it is, then I shall return to the question of what I can say about the dates.
15. Finally in terms of allowability, TickeToGo Ltd, suggest that the question of infringement is not properly set out, since the request provides insufficient detail on how the Application (App) to be considered works. This requires a detailed consideration of the question as posed in the opinion request, so I shall return to this later.

The Patent

16. Before considering the documents put forward in the request I will need to construe the claims of the patent following the well known authority on claim construction which is *Kirin-Amgen and others v Hoechst Marion Roussel Limited and others* [2005] RPC 9. This requires that I put a purposive construction on the claims, interpret it in the light of the description and drawings as instructed by Section 125(1) and take account of the Protocol to Article 69 of the EPC. Simply put, I must decide

what a person skilled in the art would have understood the patentee to have used the language of the claim to mean.

17. The Patent, GB 2391101, has 17 claims, but only a single independent claim 1, which reads:
 1. *A method for issuing a ticket to a user of a communication interface for communicating with a data server over a publicly accessible communication network and formatting data received from the server, and of a printer capable of printing information formatted by the communication interface, the method comprising : **generating a code number for the ticket; forming an image file of an image file format, the image file representing an image in that format of a bar code corresponding to the code number; and providing to the communication interface over the publicly accessible communication network by means of the data server ticket data defining the appearance of a ticket, **the ticket data including the image file.*****
18. The application suggests that one embodiment of this will be an internet service where a buyer can purchase tickets and print out the web page for reference. This would allow the buyer to identify themselves at a venue.
19. The Patent suggests on page 2 that barcodes generated at the user's browser, using a barcode font, may be difficult to read reliably. Further description is provided in the last paragraph of page 7 on transmitting that information. This background helps to explain why I have highlighted part of this claim above in bold (and noting the antecedence for "the image file" in the last line). The claim requires that the ticket data includes an image file representing a bar code corresponding to a code number for the ticket and that there is a step of transmitting that image file.
20. In their observations in reply, Corethree suggest that the construction of an image file should simply be a file that can accurately transmit an image. I am not convinced because of the background set out in the Patent, that such a broad interpretation should be taken.
21. I should perhaps at this point, say that my understanding of what the skilled man would understand the words "image file" to mean. It seems to me that in this art, an image file is a file format which allows for the rastering (for example pixel by pixel) of data. The Patent in the paragraph spanning page 9 and 10, describes the file format as being for example a GIF, JPEG, TIFF or bitmap file, and that it is preferred that a format which encodes each pixel rather than a blockwise or lossy compression format is used. All of this is consistent with my understanding of the use of the term file format in this art.
22. The observations from TickeToGo highlight a question of construction in relation to claim 1 and the requirements on the printer. TickeToGo make two arguments to suggest that the underlined feature "the printer" – is not in fact a real limitation to the claim. First, they suggest that the claim is worded "a user of" a communication interface and "a user of" a printer. This TickeToGo suggest means that claim 1 does not require a printing step to take place.

23. Further, TickeToGo provide a second argument based on *Adhesive Dry Mounting v Trapp* (1910) 27. RPC 341. This follows the logic that if a feature is included in a dependent claim, then the appellant or in this case, the independent, must be construed so as to be broader than that dependent claim. Here, claim 2 reads:

2. *A method as claimed in claim 1, comprising the step of formatting the ticket data by means of the communication interface and printing the formatted ticket data including the image file by means of the printer*

24. However, I do not think that the wording of the claims here quite put us in that position, of suggesting that words included in the claim should be ignored. Claim 2 provides further limitations, in terms of a formatting step for ticket data, and the formatted ticket data including an image file. That means that claim 1 covers embodiments, where the printing does not occur, or where what is printed does not include the image file.

25. I do not therefore believe that claim 1 cannot sensibly be construed as it stands, whilst it does not require anything of how the printer operates, or what specifically is printed, it does require a user to have access both to the communications interface, and a printer.

26. The request and observations do not raise any other particular issues of construction.

27. However, I feel I should say something about what the communications interface in the claim means. The claim requires that the communications interface first: communicates with a data server over a publicly accessible communication network and formats the data received from the server and secondly, that the communications interface is provided with data server ticket data defining the appearance of a ticket. In the abstract, the communications interface could be a broad term encompassing all of the communications with the device, or a narrow term limiting the communications interface to a single function in dealing with ticket data.

28. So what help is there in the description as to which interpretation to take. In the first paragraph of page 7 of the Patent, it is suggested:

The web browser acts as a communications interface with the web server...

29. This suggests that the communication interface is at least in this embodiment envisaged to be the general purpose web browser of a PC. I have found nothing in the description that requires the communication interface to be construed narrowly, for example to relate to a single task/application. I do not therefore think that the claim requires that the communications interface (or the browser in the embodiment described on page 7) could not be capable of printing something other than the ticket.

Infringement

30. Section 60 Patents Act 1977 governs what constitutes infringement of a patent; Section 60(1) reads:

Subject to the provision of this section, a person infringes a patent for an invention if, but only if, while the patent is in force, he does any of the following things in the United Kingdom in relation to the invention without the consent of the proprietor of the patent, that is to say -

(a) where the invention is a product, he makes, disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise;

(b) where the invention is a process, he uses the process or he offers it for use in the United Kingdom when he knows, or it is obvious to a reasonable person in the circumstances, that its use there without the consent of the proprietor would be an infringement of the patent;

(c) where the invention is a process, he disposes of, offers to dispose of, uses or imports any product obtained directly by means of that process or keeps any such product whether for disposal or otherwise.

31. Section 60(2) of the Patents Act 1977 states:

Subject to the following provisions of this section, a person (other than the proprietor of the patent) also infringes a patent for an invention if while the patent is in force and without the consent of the proprietor, he supplies or offers to supply in the United Kingdom a person other than a licensee or other person entitled to work the invention with any of the means, relating to an essential element of the invention, for putting the invention into effect when he knows, or it is obvious to a reasonable person in the circumstances, that those means are suitable for putting, and are intended to put, the invention into effect in the United Kingdom.

32. The request asks me to consider whether three scenarios might infringe the patent. TickeToGo in their observations suggest that I should not give an opinion on this part of the question, as they argue that rule 93(6)(a), which repeats Section 74A(1), requires a positive recitation of a particular act.

33. Section 74A(1) of the Patents Act 1977 states:

The proprietor of a patent or any other person may request the comptroller to issue an opinion –

(a) as to whether a particular act constitutes, or (if done) would constitute, an infringement of the patent;

34. I do not think that Section 74A(1) is as prescriptive as TickeToGo argue, it envisages considering acts “if done.” Indeed, taking a step back, the opinion service was designed to provide a low cost way for firms or individuals to gain an independent view of what the situation in relation to a particular patent might be. That might be before a company contemplates embarking on research and development into something, or much closer to the point of putting a product on the market. In any case, the Act says that an opinion can consider hypothetical scenarios - if done.

35. However, there is, as TickeToGo argue, a wrinkle in the above scenarios. As I have highlighted, the claim requires above that there is a step of:

generating a code number for the ticket; forming an image file of an image

file format, the image file representing an image in that format of a bar code corresponding to the code number;

36. The three scenarios listed in the request, which I am asked to consider, are silent on this question.
37. However, Corethree do go on to provide more detail on an App that they have developed. The information that Corethree provide in their request suggests that they have developed an App that generates a bar code that is not an image file of an image file format. They further suggest that there is no print interface within the app – at least in the Apple or Android versions. TickeToGo question whether the opinion should consider the detail of this, as the submissions amount in effect simply to an assertion that an App might have certain characteristics, and I have no evidence in front of me of whether the App will or will not have those characteristics.
38. I note also, that in their original request Corethree provided as Exhibit 1, a letter headed as being from TickeToGo, which suggests that the Intalink Partnership is infringing the Patent, and setting out in broad terms the features of the claim against a ticket issuing arrangement. In their observations in reply, Corethree suggest that they supplied an App to Intalink. Quite apart from the question of whether the Corethree App described, is the same as the alleged infringement in that letter, the letter similarly amounts to no more than a set of assertions about a product/service that I am not in a position to examine. In their observations in reply, Corethree assert that the features of the App could be easily tested by running the app in a flight safe type mode, which prevented information being transferred. However, I have not been presented with any evidence, and certainly not in the original request of whether this is true or not. Moreover, in their observations in reply, Corethree suggest that the details of how the App work are proprietary and confidential and not necessary for the UKIPO to reach a conclusion on infringement.
39. Therefore, in terms of the other features of the App, and whether they meet the claims, I cannot be sure of whether in practice the App exhibits these features, as I have no evidence on this point.
40. So where does this leave me, I certainly think that it is true to say that I cannot determine the facts of whether the Corethree App does or does not have these additional features. I will therefore not be able to come to an opinion on whether the Corethree App does or does not provide these additional features, which are of course required by the claim.
41. However, I think that I can say something about the scenarios that I am asked to consider, that may be useful, in terms of the specifics of this printing step, which is placed front and centre in the three scenarios outlined by Corethree in their original request.
42. As I have construed the claim, it does not require a particular relationship between the user's access to the printer and the communications interface. That is to say, the claim is not limited to a narrow construction where the communication interface must print tickets generated for example within an application with the particular characteristics required by the rest of the claim. So to turn to the scenarios presented:

- a. A mobile ticketing application that lacks the native ability to print tickets generated by the application
 - b. A mobile ticketing application, where a user could print by making a screen capture of the application and then using a different application or a utility in the operating system in the operating system to print the image
 - c. If a screen shot of the ticket is in fact unusable as a ticket (i.e. invalidated by technological measures) the mobile ticketing application infringes.
43. I do not therefore believe that the question of whether an application lacks native ability, or whether a screenshot could be printed is determinative of whether infringement will or will not occur. That is to say, none of these three scenarios on their own, within an otherwise infringing method, would avoid infringement.
44. In concluding, I should state where that leaves me, based on the different assertions that have been made. If an App does not provide the other features required by the claim (as Corethree assert and describe in the request), including the use of an image file, then it will not infringe. Of course, the corollary to that is that if an App were to provide all of those features, then it would infringe.

Validity

45. Corethree submitted five arguments based prior art, which they assert suggest that the claimed invention is not novel. I shall take these in turn.
46. Corethree's first argument is based upon the Alaska Airlines check in system, as set out in exhibits 2-5. Each of these exhibits provides a high level description of the introduction of a web based system for printing boarding passes. Having looked at these documents, exhibit 2, from the annual report (the publication date of which I discussed above) and exhibit 4 do not specify that the boarding pass involves a bar code. Even when I turn to exhibits 3 and 5, which mention the use of a bar code, they do not describe how the barcode is delivered, and whether the ticket data includes image data for that bar code as such.
47. Corethree's second argument is based on the Ticketmaster online ticketing system, shown in exhibit 6. Again, this describes a web based system for printing tickets, but lacks any detail on whether a barcode is used. I therefore believe that Exhibits 2-6 do not anticipate claim 1.
48. Next, I turn to WO01/03040. Corethree highlight page 27, lines 20-24 in relation to this feature of generating an image file format, this passage reads:

As yet another example, the information may be coded or written into a piece of paper forming, for example, a ticket, certificate or receipt. With this example, the information may be encoded in a numeric code or bar code or any other similar data capable of being read by a standard bar code reader or other similar device.

49. Corethree then highlights page 28 lines 10-14 which read:

When the requested document is received by the client, the browser displays the web page as defined by the page description language. Typically, the document contains various tags that control the displaying of text, graphics, controls, and other features. The document may also contain the URLs of other web pages available on that particular server or on other server computing systems.

50. As set out earlier in that paragraph this leads to the display of information based on html instructions. Html typically will include instructions to retrieve for example an image file from a particular web address at a particular point on a web page. This of course falls short of saying that an image file representing the bar code is generated and included in ticket file that is transferred over the network.
51. TickeToGo in their response suggest that the wording of figure 27 – that a unique bar coded ticket is generated on the website implies that it is generated on the user's browser. Of course, as I noted, the application itself suggests that the prior art involved generating the bar code image using a bar code font at the user's device – and this argument is at least consistent with that. However, Corethree argue in their reply that this is to stretch the meaning of "generated on the website" – as they argue that websites are hosted at servers, and that all that is presented on a browser is something that has been generated at the server. Nonetheless, this figure and the related part of the description are silent on whether the bar code is generated as part of an image file for transmission. So I conclude that this feature of the claim is not disclosed by this document.
52. Next to turn to WO 00/74300 and this file image feature. In their request, Corethree highlighted three passages on pages 29, lines 27-29, page 29 lines 30-34 and page 44 lines 27-30. But I should perhaps also highlight page 42, lines 27-34 which reads:

The ticketing server delivers the ticket to the consumer's browser organized, most preferably, in the form of a 2-D bar-code (and, optionally, some accompanying text), which is then, in the printed version of the digital ticket 1 shown in Figure 1, printed as bar code 11. The consumer need not arrive at the event early to pick up tickets; instead, the printed 2-D bar coded digital ticket 1 is simply presented to the ticket taker, who verifies it with a laser scanner.
53. Again, TickeToGo highlight that this and the other passages mentioned do not provide clear enabling disclosure of forming an image file for the bar code for transmission, as required by the claim.
54. Finally to turn to US5598477, and this same image file feature, here Corethree highlight column 3 lines 51-60 which reads:

Preferably field 22BC includes information T which corresponds to at least a part of the conventional ticket information printed in field 22T, and preferably information T will include sufficient information to enable automatic reconciliation of ticket 22, as will be described further below. Information T may either be fully encrypted or, preferably, may be digitally signed. As is well known to those skilled in the arts information is digitally signed by extracting a portion of the information, such as a check sum, and encrypting

the extracted information. The signed information is then validated by repeating the process and comparing the digital signatures. In an alternative embodiment of the invention field 22BC can contain only a signature of the conventional information in field 22T and information to reconcile ticket 22 can be recovered by optical character recognition (OCR) techniques or an operator, if desired.

55. I would however, also note column 6 lines 10-29 which read:

Turning to FIG. 5 a protocol is shown which protects against the possibility of third parties attempting to intercept messages to local printing system 20 and producing counterfeit duplicate tickets. Data processing system 12-1 stores a list of encryption key E_s associated with various local printing systems which communicate with data processing system 12-1 and also store encryption key E_i and encryption decryption key E_m [D_i] as described above with regard to FIG. 4. Encrypted validating information is formed as described with respect to FIG. 4 and encrypted again with a particular one of keys E_s corresponding to local printing system 20. Printing system 20 stores a corresponding decryption key D_s to decrypt the doubly encrypted validating information and then prints the encrypted validating information in two dimensional barcode format as described above with respect to FIG. 4. Validating system 26, of course, also operates as shown in FIG. 4. By also encrypting the plain text information to be printed on ticket 22 a person intercepting the message would be unable to even print a counterfeit duplicate ticket.

56. Again it is clear that a bar code is provided, but not what is transmitted from the system encrypting the information in its plain text form, and some other form. TickeToGo in their observations suggest that the PDF417 is a bar code symbol format, and not an image file format for barcodes. As it stands there is no further evidence in the request or observations on the question of whether the PDF417 standard includes a file format, or whether that file format would be an image file format. So again I conclude that this feature of the claim is not clearly shown in US5598477.

57. However, that is not the end of the enquiry, in that the request also asks me to consider whether the Patent is obvious. To determine whether or not an invention defined in a particular claim is inventive over the prior art, I will rely on the principles established in *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588, in which the well known Windsurfing steps were reformulated:

- (1)(a) Identify the notional "person skilled in the art";*
- (1)(b) Identify the relevant common general knowledge of that person;*
- (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;*
- (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;*
- (4) Viewed without any knowledge of the alleged invention as claimed, determine whether those differences constitute steps which would have been obvious to the person skilled in the art.*

58. There is little argument provided in the request or observations on the question of inventive step, and the structured test implied above. Indeed, there is no real attempt to define the person skilled in the art, or what the common general knowledge of that person might be. As I have noted in relation to novelty, none of the documents show that at the time of the application, the use of an image file for a barcode and its transmission to the user was known. The only clue as to how data was transferred at the time, in the papers before me, comes from the Patent's description of the prior art, from page 2 that:

For example in one way to generate bar codes...is to use a bar code font.

59. This implies that there were other ways to generate bar codes, and perhaps even to transmit them. However, I have no evidence before me to suggest that this step was either in a document that was part of the "state of the art" nor part of the common general knowledge. I must therefore conclude that these documents do not show that the Patent lacks an inventive step.

The dependent claims

60. Having come to the conclusion that claim 1 is novel and inventive, in respect of the documents provided in the request, I shall not need to turn to the dependent claims.

Opinion

61. It is therefore my opinion that the Patent is novel and inventive in relation to exhibits 2-9 as identified in the request.
62. I have been unable to come to a clear view on whether the Corethree App infringes, as I have not been presented with sufficient evidence on what is actually proposed. However, in relation to the detail of the printing step which is the focus of the three scenarios presented. The specific steps proposed in those scenarios, would not be sufficient to avoid infringement, if the other features, which I have not explored, were to be met.

Application for review

63. Under section 74B and rule 98, the proprietor may, within three months of the date of issue of this opinion, apply to the comptroller for a review of the opinion.

Robert Shorthouse
Examiner

NOTE

This opinion is not based on the outcome of fully litigated proceedings. Rather, it is based on whatever material the persons requesting the opinion and filing observations have chosen to put before the Office.