



BL O/025/07

18th January 2007

PATENTS ACT 1977

APPLICANT Roger Colston Downs

ISSUE Review of Opinion 04/06 - whether
patent number GB2295741 is infringed

HEARING OFFICER P Marchant

DECISION

- 1 This is a review of an opinion ("the Opinion") under the recently introduced sections 74A and 74B of the Patents Act. The Opinion was requested by Mr Roger Colston Downs concerning an alleged infringement of patent number GB2295741, of which he is the inventor and patentee. The Opinion issued on 23 June 2006. The examiner's view was that the allegation of infringement was not made out.
- 2 Mr Downs has requested a review of the Opinion under section 74B. Rule 77H(5)(b), made under section 74B, governs the making of applications for reviews, and provides as follows:
 - (5) *The application may be made on the following grounds only—*
 - (a)
 - (b) *that, by reason of its interpretation of the specification of the patent, the opinion wrongly concluded that a particular act did not or would not constitute an infringement of the patent.*
- 3 Mr Downs' application for a review accordingly says that the Opinion was in error in its interpretation of the specification and because of that, it wrongly concluded that the alleged infringing act did not constitute an infringement. This review considers that proposition.
- 4 Capita Business Services Ltd filed observations in relation to the Opinion but do not wish to be party to the review.

The Purpose of the Review

- 5 The Act is quite specific about what aspect of an opinion can be subject to a review. It might be thought odd that provision is made for a review of an opinion at all. After all, opinions under the Act are not binding, and if a person wishes to have an issue resolved, it is usually possible to bring an action before the comptroller or the courts, or to undergo alternative dispute resolution. The rationale for providing reviews is that this option is not always available. This was explained in the consultation document that the Patent Office issued prior to introduction of the opinions service. Paragraph 34 of the consultation referred to reviews of opinions on infringement, and reads as follows:

“The patent holder may also apply to have an adverse opinion on infringement set aside, but only where the opinion has come to that adverse view as a result of (what the patent holder believes is) an erroneous construction of the patent specification. Generally speaking, if the opinion has concluded that no infringement is taking place and the patent holder disagrees, he may sue for infringement. This could include the circumstances where the patent holder disagrees with the way that the claims have been construed. But suing for infringement is not possible if the opinion was sought on a potential or hypothetical act, and in such circumstances it would be unfair to deny the patent holder a chance to overturn an infringement opinion based on a construction of the claims which is adverse to him. Thus it is proposed to allow a review of an infringement opinion where the sole issue at stake is the construction of the claims.”

- 6 Although this only envisages reviews where the alleged infringing activity is potential or hypothetical, the wording of the rule admits real activities as well, so the present one comes within its scope.
- 7 It is worth noting that section 74A(4) provides that opinions are not binding for any purpose and that under rule 77J(1) a review will either set the opinion aside (in whole or in part) or find that there is no reason to set it aside. If the whole or a part of the Opinion remains in place after this review, I observe that its status will be unaffected and that it will continue to be non-binding for any purpose.

The Patent

- 8 The Opinion set out the nature of the invention briefly in its paragraph 5 but I think it is helpful to provide a little more explanation here. The patent is entitled “Topography Processor System”. As the first lines of the specification explain, it relates to “three dimensional optical mapping systems, based on

correlated information from a phased array of image sensors". Page 7 tells us that such systems involve three or more image sensors whose fields of view share a common scene. The image sensors provide sets of data having similar attributes apart from the positions of image elements representing features of topographical detail in the scene being viewed. Image elements are represented as vectors. The spatial position of each element is represented by a unique vector intersection comprising one vector from each image sensor. The data is processed to resolve vector intersections, and thereby generate data representing the topographical detail of the scene.

- 9 The patent is concerned more specifically with arrangements for monitoring whether a topography processor system is operating correctly. It uses diagnostics which make use of the existing architecture of the system. The diagnostic processes do not interrupt the system operation, and the outcome is a graphical display of system status.
- 10 One important feature of the invention is that it operates in real time. That is to say the image data can be processed by the system at the same rate as it arrives. Such a system allows diagnostic information also to be processed in real time. It is explained that previous diagnostic equipment in systems which did not operate in real time were unable to address the integrity of the whole system, since they were able to concern themselves only with one or more subsystems at any one time.
- 11 The specification explains, for example on page 5, that in the present system diagnostic data, which are referred to as "process parameters", are mixed with frame and line synch signals of the image data. (Synch signals are parts of the video signal which provide control information and are not normally displayed.) Process parameters are used to generate graphical diagnostic information which is then shown on the system's prime display. The process parameters are said to cover all stages of system operation from end to end. They include information about the operation and calibration of the image sensors that detect the scene, the input of image data to memory locations, information about the rate at which data is being processed, the correlation of image data from the different image sensors, intermediate results from the correlation computations, and combining the results of correlations to provide the system output.
- 12 The system then generates visual patterns to represent the different aspects of system performance. At the foot of page 5 it is stated that the visual patterns depend on the system transfer functions and on the data used to stimulate the response. Looking at the first of those concepts, if the image processing system can be regarded as a black box between the origin of the diagnostic data and its output, I take "system transfer function" to mean the effect that the black box has on the diagnostic signals as they pass through the system.

- 13 The stimulation data may presumably be that arising from a scene being viewed by the system, but can also comprise information injected for diagnostic purposes. For example, on page 6 it is explained: “One technique would be to physically introduce into the system’s image sensor optical systems graphical images (perhaps photographs of the real world) ... or to introduce separate video recordings of such images into the output channels of the image sensors.”
- 14 It is initially explained that the invention avoids the need for specialised built in test equipment (“BITE”), or external test equipment, additional to the hardware already provided for image processing. However extra hardware can in fact be used to facilitate the introduction and extraction of diagnostic data, as is explained in the paragraph bridging pages 6 and 7. Notwithstanding the initial comments and the fact that this is described as “minimal non-interruptive hardware”, it seems clear that it amounts to “built in test equipment”.
- 15 The wording of the four independent claims is set out in paragraph 6 of the Opinion. They all specify “a topography processor system comprising an array of at least two image sensors” and “at least one processor arranged to process imaged detail”, and they all require diagnosis of system operation based on information about the system’s internal transfer functions.

The Opinion

- 16 In his request for an opinion, Mr Downs alleged that the London Congestion Charging Scheme (“LCCS”) infringes the patent. The operators of the LCCS, Capita Business Services Ltd (“Capita”) made observations opposing the allegations. In the Opinion, at paragraph 8, the examiner set out his understanding of the operation of the LCCS, which I find to be a fair outline of the technical features of the scheme. The paragraph reads as follows:
- “..there appears to be broad agreement between the parties as to how the LCCS system operates; each monitoring site at an exit or entry point of the London congestion charge zone has a black and white camera which takes a close-up picture of the scene when a vehicle enters or leaves the zone and is used for automatic number plate recognition (ANPR), and a colour camera which at the same time takes a wider “contextual image” of the scene, the images captured by cameras are compiled to form an evidential record.”
- 17 It was Mr Downs’ view that this scheme falls within the meaning of “topography processor system”. The examiner set out to determine the meaning of the phrase “topography processor system” in the claims and decided, as explained in his paragraph 14, that it has the following meaning:

“a device in which image data is supplied by at least two image sensors

of known separation and orientation where the image sensors view a common scene and topographical calculations are effected to obtain a 3D representation of the scene (or a portion of the scene) or to obtain the spatial position of an object in the scene”

- 18 The examiner then considered the evidence in relation to the LCCS and, based on his analysis of the meaning of topography processor system in the specification, formed the view that there is no suggestion that the LCCS performs topographical calculations on the relative positions of the two cameras and the image data provided by them, nor that it forms a 3D data representation of the scene or effects any topographic calculations such as determining the spatial position of an object in the scene. This is set out in paragraph 17 of the Opinion and is the primary consideration upon which the examiner based his conclusion.

Reviewing the Opinion

- 19 Mr Downs has made submissions for the purpose of this review in which he says that the examiner has misunderstood the specification in four principal areas: firstly the purpose of the invention, secondly that he has not “correctly identified the invention”, in particular the meaning of the phrase “topography processor system”, thirdly that he is mistaken in concluding that the specification is solely concerned with topographical calculations in the determination of the relative position of an object in a scene, is further mistaken in concluding that the LCCS does not perform topographical calculations, and is therefore mistaken in concluding the LCCS does not constitute a topography processor system according to his own criterion, and fourthly that the examiner wrongly concludes that the patent is not enabling and is insufficient.
- 20 Taking these points in turn, the first focuses on the examiner’s characterisation of the invention as involving BITE. Mr Downs accepts that the specification describes built in testing hardware in relation to the present system but says this is only illustrative and is not claimed before dependant claim 15. Since BITE is described in relation to the invention in general, as I have set out above, and is described in detail in the particular embodiment (see for example from pages 36 to 40 where a binary event generator, differential binary event generator and transform processors are all described as additional test hardware), I do not think the examiner erred in this respect. In addition there is no indication in the Opinion that the examiner considered the claimed invention to be limited by the requirement that it involve BITE; the idea of BITE forms no part of his analysis of the claims, in particular the construction of “topography processor system” on which the Opinion turns. I consequently do not agree with Mr Downs that the examiner is mistaken in his characterisation of the invention as involving BITE.

- 21 Mr Downs' second point is that the examiner did not correctly identify the invention, in particular the meaning of the phrase "topography processor system". Mr Downs says that the basis of the invention is the complexity of system architecture needed to implement it, involving such considerations as the speed of operation needed to effect diagnostics in real time, the volume of data and the need to operate both synchronously and asynchronously. He says (see paragraph 3.2.19) that it is this complexity attribute which characterises the topography processor of the invention and that determining the position of an object in a scene has nothing to do with making the invention work.
- 22 I disagree with Mr Downs. The point of the exercise is to assess what is included within the scope of the claims as a basis for determining whether the alleged infringing activity falls within it. Consequently, in assessing the scope of this phrase, it is not correct to ignore its clear and straightforward meaning, and to substitute for that meaning an underlying concept which is nowhere expressed within the wording of the claim. If that were the case it would be impossible for anyone to know what was monopolised by a patent. From my reading and consideration of the specification I can see nothing wrong with the examiner's understanding of the meaning of "topography processor system". In particular it is clear that such a system must process image data and generate information representing the topography of the scene, that is to say the positions and shapes of elements within its field of view.
- 23 Mr Downs' third point comes in two parts; firstly that the examiner was mistaken in concluding that the specification is concerned with topographical calculations in the determination of the position of an object in the scene and secondly that the examiner was mistaken in concluding that the LCCS does not perform topographical calculations.
- 24 Concerning the first of these two parts, Mr Downs' point (expressed for example in sections 3.4 and 3.5 of his submission) is as I understand it that the invention is not concerned with topographical calculation or determination of the location of objects within the field of view because those processes were already well known, and because the independent claims do not contain any detail as to how such calculations are carried out. I think this is another way of putting the second point above, that is that Mr Downs does not think a "topography processor system" as described in the patent specification necessarily involves topographical calculations. I have already said that I consider it does.
- 25 The second part of point three is concerned with the issue whether the LCCS performs topographical calculations in the sense required by the present claims. The inquiry in this review is to assess whether "by reason of its interpretation of the specification of the patent, the opinion wrongly concluded that a particular act did not or would not constitute an infringement of the patent". Consequently, it is only if I find that there is an error in the

interpretation of the specification within the Opinion that I need go on to consider whether as a result of that error the infringement assessment was flawed. That being the case I will not pursue this question unless it becomes necessary.

- 26 Mr Downs' fourth point is to challenge the assertion, as he perceives it to be, in the Opinion, that the patent is insufficient because it is not enabling. In fact the Opinion does not say this. What it does say (in paragraph 15) is that if the claims were to be construed in the way Mr Downs proposed, that is to include arrangements falling outside the straightforward meaning of their words, then they would be insufficient. Since the Opinion did not follow Mr Downs' view of construction, it involves no assertion of insufficiency.

Conclusion

- 27 I have considered Mr Downs' representations as to interpretation of the specification but have not been persuaded by them. I have considered whether there are any other grounds not identified by Mr Downs but relevant to the interpretation of the specification and to the allegation of infringement, in respect of which the Opinion may have been in error. If there had been any, I would have considered them too but I can find none, the only issue of relevance being the one Mr Downs has identified.
- 28 I consequently find that the Opinion correctly interpreted the specification of the patent in the present case, and as a result I make no order to set the Opinion aside.

Appeal

- 29 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

P Marchant

Deputy Director acting for the Comptroller