



**PATENTS ACT 1977**

APPLICANT Fisher-Rosemount Systems Inc.

ISSUE Whether patent application number GB1004051.7  
complies with Section 1(2)(c)

HEARING OFFICER Phil Thorpe

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**DECISION**

- 1 This decision concerns whether the invention set out in patent application GB1004051.7 relates to excluded matter. The examiner has maintained throughout the examination of this application that the claimed invention is excluded from patentability under section 1(2) of the Patents Act 1977 as a program for a computer, a mathematical method and the presentation of information. The applicant has not been able to overcome the objections, despite amendments to the application.
- 2 The matter therefore came before me at a hearing on 12<sup>th</sup> January 2015, at which Mr Russell Sessford of Forresters appeared on behalf of the applicant.

**The Patent Application**

- 3 GB1004051.7 is entitled "Scaling composite shapes for a graphical human-machine interface". It was filed on 11<sup>th</sup> March 2010 and has an earliest priority date of 13<sup>th</sup> March 2009. It was published on 22<sup>nd</sup> September 2010 as GB 2468753 A.
- 4 The invention relates generally to process plants and, more particularly, to the scaling of composite shapes in an editor for graphical representations of components and various activities associated with plant configuration, control, maintenance, and simulation. The composite shapes depict components within the plant and each composite shape may contain a number of primary elements and sub-elements. For example in figure 5a of the application the graphical display shows a composite shape known as Tank1 which includes a number of sub-elements for example the tank itself and inlet and outlet (130a & 132a).

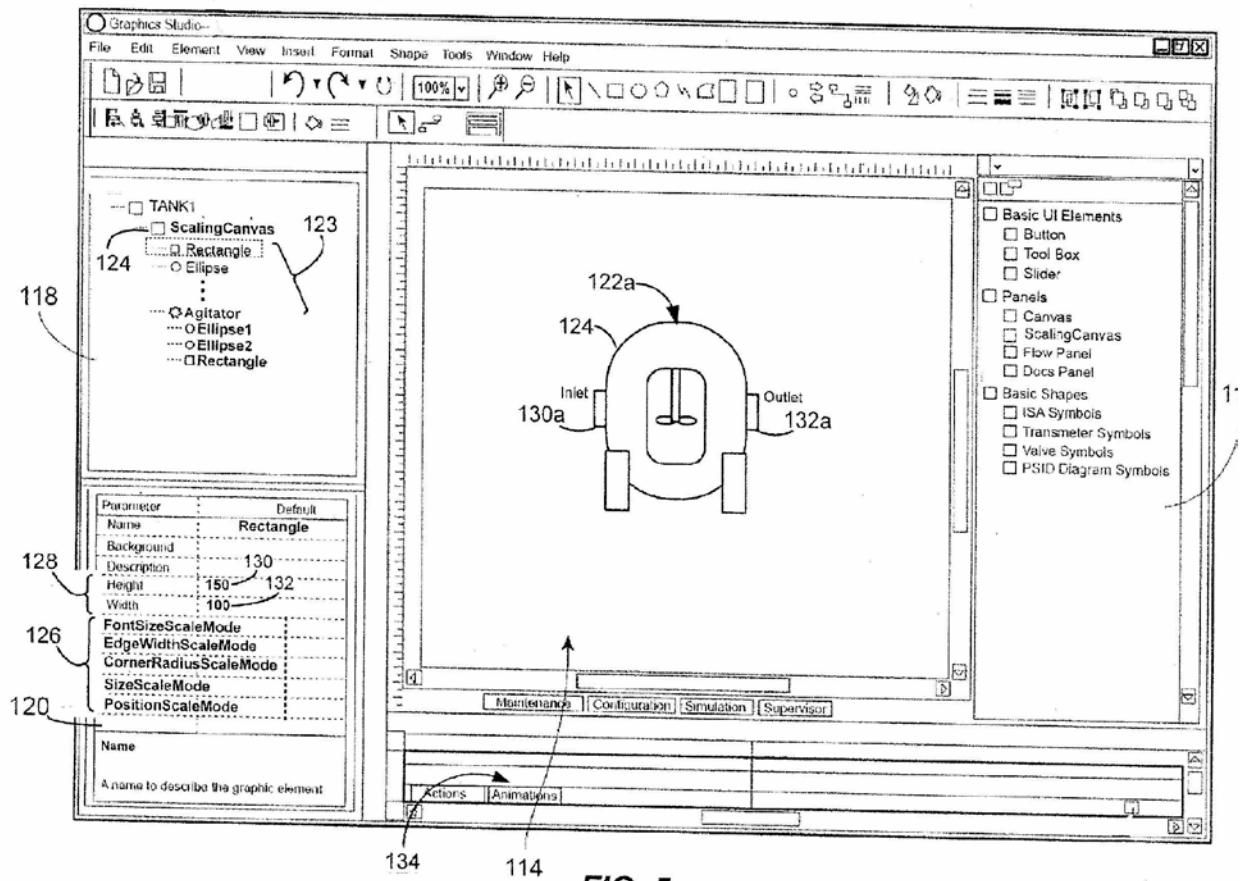
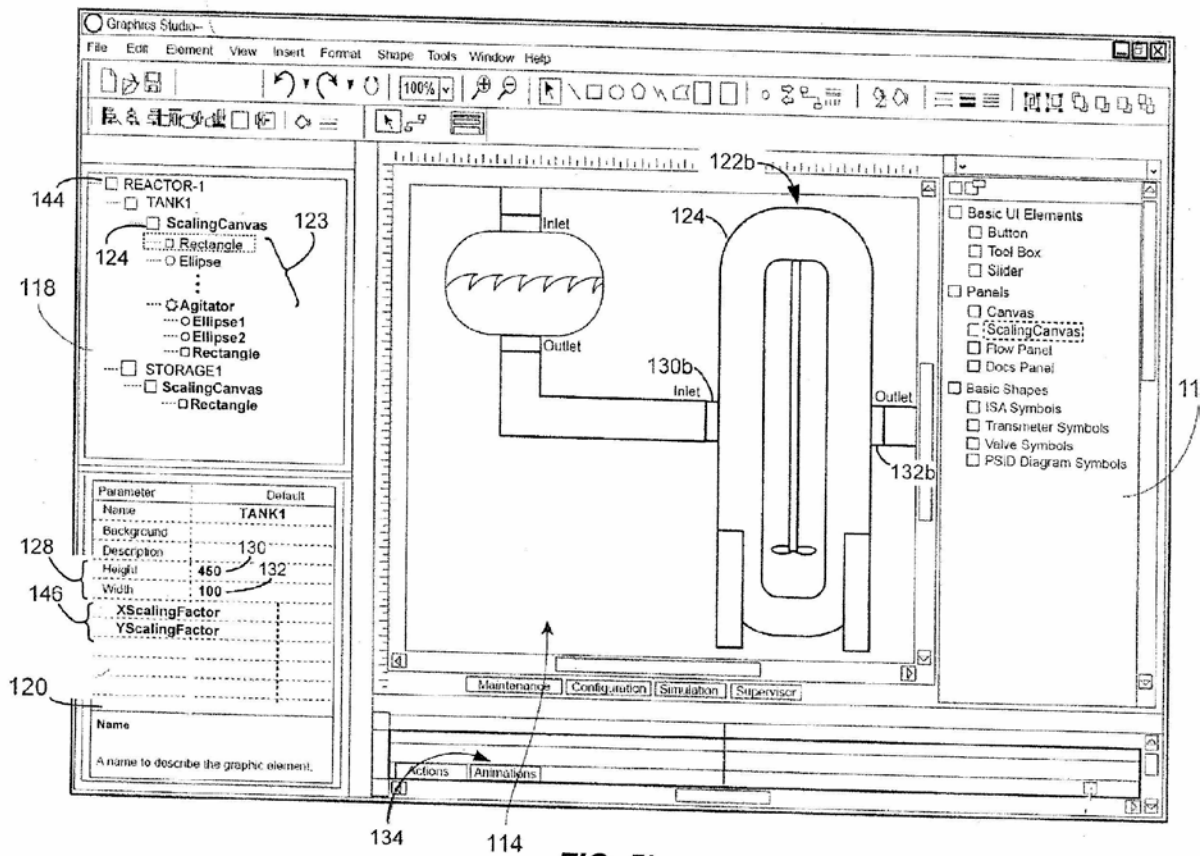


FIG. 5a

- 5 According to the application, prior art graphic display editors that included functionality to resize composite shapes often resized all the sub-elements of the composite shape using the same scale factor irrespective of whether that was appropriate. This could result in a distorted image. The invention seeks to overcome this problem by providing if necessary different scaling factors for one or more of the sub-elements.
- 6 Hence in figure 5b the size of the tank and the length of the shaft of the stirrer have had a first scaling factor applied whilst the size and position of for example the inlet and outlet sub-elements have been subject to a different scaling factor (in this instance a scaling factor of 1).



- 7 The resizing can occur at configuration time or at runtime. For example the user overseeing the operation of the plant could re-size the composite shapes so as to arrange the graphical display in a desired manner. This “improved display” may enable the operator to better control the process control system. It should be noted that the invention itself does not directly control or affect the process - any improvement in the control or management of the process is effected by the user of the graphical display taking action based on what is displayed.
- 8 Mr Sessford asks that I base this decision on the claims filed on 24<sup>th</sup> February 2014. Claim 1 reads as follows:

A computer program comprising a computer-readable medium having a computer-readable program code embodied therein, the computer-readable program code adapted to be executed to implement a method for scaling composite shapes for an operator display in a process control system for use in a process plant, the method comprising:

displaying a composite shape that graphically illustrates an entity within the process plant, the composite shape including one or more sub-elements, each sub-element including one or more unscaled parameters and one or more scaling parameters, wherein each scaling parameter defines a resizing behaviour of a corresponding sub-element;

resizing the composite shape in one or more dimensions;

calculating a scaling factor for each resized dimension of the composite shape; and

applying one or more calculated scaling factors to each unscaled parameter associated with a scaling parameter using the resizing behavior defined by the scaling parameter, wherein the resizing behavior determines how the calculated scaling factor is applied to each sub-element to prevent distortion of the sub-element resulting from resizing the composite shape and the sub-element in one or more dimensions.

- 9 There are also independent claims directed to a graphic display editor (claim 15) and a computer system for use in a process control plant (Claim 26). Mr Sessford accepted that all three independent claims include the same or corresponding special technical features and that if claim 1 was excluded then these other two independent claims would also be excluded.
- 10 The applicant has also put forward two auxiliary claim sets. I will discuss those later if I find that the claims of 24<sup>th</sup> February are not allowed.

### The law

- 11 The examiner has raised an objection under section 1(2) of the Patents Act 1977 that the invention is not patentable because it relates inter-alia to one or more categories of excluded matter. The relevant provisions of this section of the Act are shown in bold below:

**1(2) It is hereby declared that the following (amongst other things) are not inventions for the purpose of the Act, that is to say, anything which consists of –**

*(a) a discovery, scientific theory or **mathematical method**;*

*(b) a literary, dramatic, musical or artistic work or any other aesthetic creation whatsoever;*

*(c) a scheme, rule, or **method for performing a mental act, playing a game or doing business, or a program for a computer**;*

*(d) **the presentation of information**;*

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

- 12 As explained in the notice published by the UK Intellectual Property Office on 8<sup>th</sup> December 2008<sup>1</sup>, the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgment of the Court of Appeal in *Aerotel/Macrossan*<sup>2</sup>.
- 13 The interpretation of section 1(2) has been considered by the Court of Appeal in *Symbian*<sup>3</sup>. *Symbian* arose under the computer program exclusion, but as with its

<sup>1</sup> <http://www.ipo.gov.uk/pro-types/pro-patent/p-law/p-pn/p-pn-computer.htm>

<sup>2</sup> *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7

<sup>3</sup> *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1

previous decision in *Aerotel/Macrossan*, the Court gave general guidance on section 1(2). Although the Court approached the question of excluded matter primarily on the basis of whether there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel/Macrossan* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach to the question in *Aerotel/Macrossan* was never intended to be a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*<sup>4</sup> which rested on whether the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case.

- 14 Subject to the clarification provided by *Symbian*, it is therefore appropriate to proceed on the basis of the four-step approach explained at paragraphs 40-48 of *Aerotel/Macrossan* namely:
- (1) Properly construe the claim.
  - (2) Identify the actual contribution (although at the application stage this might have to be the alleged contribution).
  - (3) Ask whether it falls solely within the excluded matter.
  - (4) If the third step has not covered it, check whether the actual or alleged contribution is actually technical.
- 15 Mr Sessford accepted that this is the correct approach to follow.

### **Step 1 – Properly construe the claim**

- 16 The only issue of construction that arises is whether the claims require the display of the undistorted resized composite shape. Mr Sessford argues that since the claimed invention is intended to prevent distortion of the display of a composite image, it is implicit that the claimed invention includes the display of the resulting image, and that if the resulting image is not displayed it cannot be said that distortion has been prevented. I am content to accept that displaying the resized image is implicit in the claims.
- 17 The examiner also raised a clarity objection against the use of the terms sub-elements and composite shapes. However, I am content that their use is clear. As stated above, a control system component may be represented as a composite shape including any number of sub-elements. The sub-elements may comprise primary shapes or text, or may themselves be composite shapes.
- 18 Other than that the construction of the claim is clear.

### **Step 2 – Identify the actual contribution**

- 19 Mr Sessford argues that the contribution is, in the context of a process control system, the provision of an operator display including a composite shape representing an entity in a process plant and including various sub-elements,

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<sup>4</sup> *Merrill Lynch's Appn.* [1989] RPC 561

wherein a single scaling factor is applied to the sub-elements differently depending on scaling behaviours specific to each of the sub-elements. This allows the composite shape to be resized without distortion of the shape.

20 I am content to accept this as the contribution.

**Steps 3 & 4 - Does the contribution fall solely within excluded matter and is it actually technical in nature**

21 The examiner has objected that the contribution falls solely within the categories of a program for a computer, the presentation of information and a mathematical method.

22 Mr Sessford contends that taken as a whole, the invention can be considered from a number of different perspectives all of which point to it extending beyond the realms of excluded subject matter.

23 Firstly the contribution made by the invention is akin to that achieved by a filter applied through digital image processing. He suggests that cases such as *Vicom*<sup>5</sup> demonstrate that such inventions are not excluded. Indeed he goes on to suggest that this case is on all fours with *Vicom*.

24 The invention considered in *Vicom* relates to a new method of digital image processing that was claimed to require less computation resource than prior art methods. In finding that the invention did not relate to excluded subject matter the EPO's Board of Appeal noted:

“5. There can be little doubt that any processing operation on an electric signal can be described in mathematical terms. The characteristic of a filter, for example, can be expressed in terms of a mathematical formula. A basic difference between a mathematical method and a technical process can be seen, however, in the fact that a mathematical method or a mathematical algorithm is carried out on numbers (whatever these numbers may represent) and provides a result also in numerical form, the mathematical method or algorithm being only an abstract concept prescribing how to operate on the numbers. No direct technical result is produced by the method as such. In contrast thereto, if a mathematical method is used in a technical process that process is carried out on a physical entity (which may be a material object but equally an image stored as an electric signal) by some technical means implementing the method and provides as its result a certain change in that entity. The technical means might include a computer comprising suitable hardware or an appropriately programmed general purpose computer.”

6. The Board, therefore, is of the opinion that even if the idea underlying an invention may be considered to reside in a mathematical method a claim directed to a technical process in which the method is used does not seek protection for the mathematical method as such.”

25 Thus according to Mr Sessford although the invention here involves a mathematical method, like the invention in *Vicom*, that method (of resizing only certain elements of the composite image) is being used in a technical process and is being carried out on images by technical means in the form of a computer. He further contends that *Vicom* also does not distinguish between real images for example real photographs and computer generated images. He seeks support for this from the discussion earlier in the decision relating to industrial applicability where the Board stated that:

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<sup>5</sup> *Vicom* T0208/84

“Clearly a method for obtaining and/or reproducing an image of a physical object or even an image of a simulated object (as in computer-aided design/computer-aided manufacturing (CAD/CAM) systems) may be used e.g. in investigating properties of the object or designing an industrial article and is therefore susceptible of industrial application.”

- 26 Mr Sessford also stresses that an invention that would be patentable if implemented in hardware should not be excluded if implemented by a computer. He refers in this respect to paragraph 16 of *Vicom* which reads:

“16. In arriving at this conclusion the Board has additionally considered that making a distinction between embodiments of the same invention carried out in hardware or in software is inappropriate as it can fairly be said that the choice between these two possibilities is not of an essential nature but is based on technical and economical considerations which bear no relationship to the inventive concept as such.

Generally speaking, an invention which would be patentable in accordance with conventional patentability criteria should not be excluded from protection by the mere fact that for its implementation modern technical means in the form of a computer program are used. Decisive is what technical contribution the invention as defined in the claim when considered as a whole makes to the known art.”

- 27 He also refers in this respect to *American Optical's Application*<sup>6</sup>. This is a case decided under the 1949 Act. The invention at issue was a method of avoiding distortion when a film was projected onto a screen by a projector located at the back of the auditorium. The method involved recording the picture using a special lens and then projecting the distorted image onto a curved screen so as to produce a final image free of distortion. Mr Sessford contends that the method in *American Optical* would be patentable if it was instead implemented by software. Obviously this was not something the judge deciding that case back in 1957 had to consider. All he was asked to consider was whether the claim to one aspect of that invention, the film carrying the distorted recorded picture, was equivalent to a printed sheet or the like and thus excluded from protection. He decided it wasn't and allowed the claim.
- 28 Mr Sessford highlights the similar aims in *American Optical* and the invention here to avoid distortion in images. He suggests that if the invention here had achieved that aim with a new lens or new piece of hardware then that would be allowable. I suspect he is right but the invention claimed here is not to a new arrangement of hardware but to a computer program and the Act includes a specific provision that excludes computer programs (as such). It has no comparable exclusion for physical lenses. It is not enough simply to say that anything that can be done in hardware would not be excluded if it was done instead in software. Rather what *Vicom* and others cases are saying is that an invention that provides a technical contribution is patentable irrespective of whether it is done through hardware or software. So the argument that Mr Sessford seeks to make succeeds only if the invention in issue here provides a technical contribution.
- 29 Mr Sessford argues that *Vicom* supports the proposition that processing digital images does provide a technical contribution. He refers also to the Comptroller's decision in *Hewlett-Packard Development Company's Application* (Hewlett Packard)<sup>7</sup>. The invention in that case, which Mr Sessford argues is considerably less

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<sup>6</sup> *American Optical's Application* [1958] RPC 40

<sup>7</sup> BL O/466/11

technical than the invention in issue here, relates to creating a searchable image database by automatically identifying various characteristics of an image to enable descriptive words to be assigned to that image. The invention enables images to be searched and retrieved from a database through text-based queries. The Hearing Officer in allowing the application noted:

“34 The contribution resides in processing real world image data to generate a representation of the image which allows words to be automatically allocated to it. Although this is not processing the image data by applying mathematical techniques in order to get out, at the end, a better quality image, it is processing the image data by applying mathematical techniques in order to achieve a different outcome – namely, a representation of the image which is then suitable for the assignment of words.

35 Vicom makes clear that processing an image to provide a change in that image is a “technical process”. I have read Vicom carefully, and I am not persuaded that this finding is necessarily restricted to the type of image processing where the output is an image of improved quality in some way. In my view the steps contained in the contribution of the present invention, of processing the image to generate a simplified representation which has particular properties suited to the intended use, are technical image processing steps to which the reasoning of Vicom may be said to apply. It follows that I find that the contribution relates to a technical process within the meaning of Vicom.”

- 30 Similar reasoning can according to Mr Sessford be found in EPO decision T 49/04 (Walker) which relates to enhancing the presentation of text in a natural language on a display according to predefined rules. There the EPO Board of Appeal found that:

“...a feature which relates to the manner how the “cognitive content”, such as images, is conveyed to the user can very well be considered as contributing to a technical solution to a technical problem. “

- 31 This decision also drew on the reasoning in another EPO decision, T643/00 (Canon), to suggest that this would in particular be the case when the particular manner of conveying the information enables the user to perform their task more efficiently.

- 32 Image processing was also considered by the Court of Appeal in Fujitsu<sup>8</sup>. The invention under consideration there related to a method of modelling crystal structures. Aldous L.J giving the leading judgement noted:

“Mr. Birss submitted that the decision in Vicom showed that patent applications for processing images of real things were not excluded from being patentable. He took us to the claim which had been considered by the Examining Division which limited the invention to a method of filtering a two-dimensional data array and compared that with the claim that was allowed which claimed a method of processing images. He submitted that it was the change from filtering to processing real images that supplied the technical contribution.

The reasoning in Vicom as to what was the technical contribution is not easy to ascertain. However, I do not read the decision as concluding that all claims to processing real images are patentable and I can see no reason why, if they are, the same reasoning should not apply to all useful images. As I read the decision, the Board saw a technical contribution, namely the generation of the enhanced picture. As the Principal Examiner pointed out:

“..., the numbers which are mathematically processed in Vicom do not merely determine the intellectual content of the images which are displayed, but are also the technical means which cause the display to operate to a technical level. Thus in Vicom manipulating numbers in the manner described affects the technical quality of

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<sup>8</sup> Fujitsu's Limited's Application [1997] EWCA RPC 608



the image. So in *Vicom*, the invention concerned the technical representation, or technical control of what is displayed and not the information content of what is displayed.”

In my view *Vicom* does not support the submission that claims to processing of real images are allowable. The technical contribution was not the fact that an image was being produced. It was the way the enhanced image was produced. “

and then later

“I believe that the application is for a computer program as such. I agree in general with the reasons of the Principal Examiner which I have quoted. In *Vicom* the technical contribution was provided by the generation of the enhanced display. In the present case the combined structure is the result of the directions given by the operator and use of the program. The computer is conventional as is the display unit. The two displays of crystal structures are produced by the operator. The operator then provides the appropriate way of superposition and the program does the rest. The resulting display is the combined structure shown pictorially in a form that would in the past have been produced as a model. The only advance is the computer program which enables the combined structure to be portrayed quicker.”

I conclude that the application does not relate to a patentable invention as it is excluded by section 1(2)(c) as being a program for a computer as such.”

- 33 Mr Sessford unsurprisingly is keen to distinguish this case from *Fujitsu*. He notes that the contribution in *Fujitsu* was computerising something that was already being done manually and hence any advantages arising from that invention were just the sort of advantages you would expect from using a computer. He notes further that since the present invention modifies the images that are processed; the contribution is more than just doing something faster and more accurately. For this reason, he argues that the invention should not be excluded as a computer program but that it should be instead regarded like the invention in *Vicom*.
- 34 I am not convinced. The problem to be addressed in this case is to my mind not a technical problem. Nor is there a technical contribution in how the final images are produced as there was in *Vicom* and presumably also according to the Hearing Officer in *Hewlett Packard*. Rather the problem here arises merely because it is decided to group together a number of separate elements into a single composite shape. There may be advantages in this but the resulting problem of how to scale only certain elements of the composite shape is not to me a technical problem and the solution of that problem by means of a computer program, no matter how clever, is not something that provides the necessary technical contribution. I would add that the “undistorted” image produced by the invention is not in the technical sense a better image in the same sense that the image in *Vicom* was considered to be.
- 35 I would add in respect of *American Optical* that the problem to be addressed there was that wide angled or panoramic pictures projected onto a normal flat screen could appear distorted when viewed from certain positions and overall lacked depth. This was to me a technical problem that the invention sought to overcome. To the extent that the invention in that case could have been implemented in software, rather than by a new arrangement of hardware, then if it was considered today then it may well have been considered allowable.
- 36 I make three points on the two EPO decisions, *Walker* and *Canon*, referred to by Mr Sessford. The first is that notwithstanding the clear steer from the Courts that the UK

and EPO should seek to provide consistent outcomes in similar situations, these decisions only have persuasive value. They have also not as far as I am aware received the recognition by the Courts that for example *Vicom* has. Secondly, I am not persuaded that the features deemed to be technical in these cases, namely in *Walker* improving how text is presented on a display and in *Canon* the format for displaying a number of images, would be held to be technical in the UK. Thirdly these cases are over 10 years old and as acknowledged in *Walker*, practice at the EPO at that time as to what was technical was far from settled.

37 Mr Sessford also suggested that the invention taken as a whole provides a better user interface and this in turns results in a better process control system. He refers to the Comptroller's decision in an earlier Fisher-Rosemount case<sup>9</sup>. The invention there concerned the operation of a process plant and providing alarms or other outputs to an operator. The Hearing Officer there found the invention not to be excluded as a computer program when it related to the control of the physical process.

38 In that case however the improved means for the operator to control the operation of the physical process resulted from how the invention monitored the process at a high level, looking at interconnections between different parts of the process so as to get a picture of the process as a whole. Hence even though the output of the invention was via a display to an operator as with the invention here, there was in my mind a technical contribution arising from how the actual process was being monitored that simply is not present here.

39 The relevance of a better interface was considered by Mann J. in *Gemstar*<sup>10</sup> where he concluded that an interface characterised by displaying certain information in a different way was not patentable irrespective of whether it was a better interface. In particular at paragraph 50 of that judgment he said:

*"The technical effect relied upon by Gemstar is a better interface, or a different interface if "better" is not relevant. That is an abstract concept. It does not describe some physical activity or effect. There is a different display on the screen, but that is not enough, in my view. That is still part of a computer program and is not an external effect (Mr Birss did not rely on any internal effect). Many computers running a program are likely to have a display output, and if that were enough to be a technical effect then every program in such a computer would be likely to fall outside the exclusion, which is unlikely to have been the intention of the draftsman of the Act. A different display to that shown before does not seem to me to go far enough to amount to a technical effect which makes a difference. .... The fact that what the user perceives and interacts with is "better" does not make an advance technical at all. Nor does characterising it as an interface give it a technical effect that it would not otherwise have had."*

40 Again care should be taken into reading too much from other cases however it clear from *Gemstar* that a better interface on its own is not enough to confer patentability. That the invention here relates to graphical representations of process elements rather than television programmes and that the method by which the image is modified here is possibly more sophisticated than in *Gemstar* does not alter the fact

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<sup>9</sup> BL O/150/07

<sup>10</sup> *Gemstar-TV Guide International Inc & Ors v Virgin Media Ltd & Anor* [2009] EWHC 3068 (Ch) [2010] RPC 10

that I do not believe that the method or interface, call it what you like, makes any form of technical contribution.

- 41 It follows that I am also not persuaded that seeking to characterise the invention here as a better process plant helps. There is no direct control of the process by the invention. All it does, clever as it may be, is to provide information on a display to an operator in a new way. How the operator then uses that information is not part of the contribution.
- 42 I should for completeness discuss the *AT&T* signposts though as Mr Sessford conceded they should be used with caution. Mr Sessford did however contend that the invention meets signposts i), ii) and v). More specifically that *Vicom* teaches that the alteration of an image on a computer screen is technical and hence to the extent that *Vicom* fits with the signposts then signpost i) is met by the current invention. I do not accept for the reasons given above that the invention here makes a technical contribution of the sort found to exist in *Vicom*. He also argues that an improved process control system will inevitably result in a better process plant and this is an effect outside of the computer. I have already addressed this point.
- 43 He also suggests that the invention operates at an architectural level within the system, being independent of the specific data concerned and is available to other components of the process control system. Hence the condition in signpost ii) is met. I disagree. The program here is directed at a specific application – scaling objects in a graphical display. There is no suggestion that the invention operates at the level of the “architecture” of the computer as that term is construed in the signposts. It does not result in a better computer other than what results from effectively running a new application. Mr Sessford’s final point in respect of the signposts is that the invention tackles the problem of distorted images directly and cannot to be said to circumvent the problem (signpost v). That may be true though since I could find no technical contribution stemming either from the problem to be solved or the method of solving it, this does not help Mr Sessford.
- 44 For the reasons set out above I conclude that the invention as claimed is excluded as a program for a computer as such. I will for completeness go on to consider whether it is also excluded as a mathematical method and the presentation of information.

### **Mathematical Method**

- 45 Mr Sessford contends that *Vicom* clearly draws the distinction between the use of mathematical methods to enhance images and mathematical methods that are excluded. In that case a mathematical method was used to process an image and that process resulted in a change to the image in a manner that produced a technical contribution. There is however no comparable technical contribution here. However the contribution still in my view relates to the practical application of the mathematical method and as such the invention is more than a mathematical method as such.

### **Presentation of information**

- 46 Mr Sessford contends that since the invention is not concerned with the actual information that is displayed, it cannot be considered to relate solely to the presentation of information. He argues that an invention will not be excluded as merely the presentation of information if it makes a contribution in a non-excluded field<sup>11</sup>. This he suggests is clearly brought out in *Gemstar* and the EPO decision T163/85 (*BBC*).
- 47 I have already discussed *Gemstar* in relation to the computer program exclusion. It is however useful in this part of the decision to say a little more about that case. *Gemstar* considered the validity of three separate patents each of which related to electronic programme guides (EPGs). The first two, referred to as the “Single Channel” patent and the “Favorites” patent” were found to be both excluded as relating to the presentation of information and a computer program, while the third, the “Transfer” patent was found not to be excluded.
- 48 The Single Channel patent is concerned with the formats in which information is displayed. It first displays programme listings in grid form, showing a number of programmes for a number of channels for various periods of time. It is possible to move a cursor so as to highlight a particular cell (and therefore a particular programme), and if that cell is selected the display switches to single channel mode. In this mode the screen shows a list of the programmes appearing on the selected programme's channel (and no others) at and around the selected time.
- 49 The Favorites patent deals with perceived problems arising out of the sheer number of channels that would appear on an EPG. It enables the user to filter out channels about which he or she would not wish to be informed, leaving him/her with “favourites”. This is done by scrolling down a displayed list and pressing a button to “mark” those which the viewer wishes to have listed for the future. By selecting (electronically, on a controller) to view just the favourites, the non-favourites are filtered out of the view, and the list is more manageable.
- 50 The Transfer patent addresses a different problem. It provides for the recording of programmes on to a digital medium, together with EPG information about that programme which is stored on the same medium. The user is then enabled to use that recorded EPG information to select the programme in question (if he wishes to do so) for re-recording the programme on to a second storage medium.
- 51 In considering presentation of information Mann J. noted in respect of the Single Channel patent as follows:

“57 .... So what achieves patentability is some real world technical achievement outside the information itself.

58 I do not consider that the single channel element of the Single Channel patent achieves this. One starts with the provision of TV programme information in a grid. This seems plainly to be the presentation of information.....

Then, as a result of cursor movement and marking, the information is then presented in a different format – a list. That end result is, equally, a presentation of information. All that has happened is that information is presented in a different way (and perhaps in a different quantity). So the starting point and the end point are, in my view, plainly presentation of information. The middle factor is the movement of a cursor, the marking of the chosen

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<sup>11</sup> See for example *Autonomy Corporation Ltd's Patent Application [2008] RPC 16*

programme which (unstated in the claims) causes the display to change. That seems to me to be accurately described as part of the selection mechanism. No-one suggested that it involved a new technical step – selecting material on screen and clicking on it so as to cause a change in its appearance on screen was part of the common general knowledge by 1990.

59 I reach the same conclusion by standing back and looking at the thing overall. It is still the presentation of information with no, or no new, technical effect. Mr Birss sought to say that there was a technical effect, and it lay in a better user interface (his mantra in this part of the case). I think that that is a form of words which disguises the reality. Providing a better (or new) user interface is not a technical description. What matters is technical effects, and that description does not shed any light on that. He frankly admitted that if that is not a technical effect, then he loses. It is not, and he does.”

and in respect of the Favorites patent

148 Insofar as that might be wrong, nevertheless the entirety of what is propounded by Gemstar as the technical contribution is the presentation of information. It undoubtedly does present information – the whole purpose is to limit information that would otherwise be presented, and then present that limited set. I have already rejected the submission that the statutory exclusion is confined to the actual content. It is wider than that. This seems to me to be a clear example of the presentation of information in any meaningful sense of those words. The patent describes a computer taking some information, getting some input from the user, and then giving the user the information he wants. It is no more than that. There is nothing which can meaningfully be described as a technical effect. There is merely a more gratified viewer of the painted screen.

52 Finally he noted in respect of the Transfer patent that

“235 Nor is the patent disqualified as being presentation of information. It involves the presentation of information, but it is more than that – there is, again, a separate independent effect which is outside that concept

234 Again the question is whether what the invention achieves has a relevant technical effect. This time I think that it does. This is not merely a computer running a program without any effect in what might be regarded as the outside world. While it does not produce a “better computer” it does actually achieve something which can be regarded as a physical effect, namely the initiation of movement of data from one disk to another (both metadata and TV programme content). That seems to me to be enough to prevent it being just a computer program as such and to render it patentable material. It is true that it does not produce an effect outside the system itself, but it is still an effect.

235 Nor is the patent disqualified as being presentation of information. It involves the presentation of information, but it is more than that – there is, again, a separate independent effect which is outside that concept”

53 Mr Sessford argues that unlike in the Single Channel and Favorites patents, the information here, ie the initial image, is manipulated and changed and that this additional step of modifying the image takes the invention outside of the presentation of information exclusion in the same way that the transfer patent was not excluded. The Transfer patent was however held not to be excluded under this head because it initiated the transfer of data from one disk to another. There is nothing comparable here. To the extent that the invention contributes to any subsequent action, for example a change in the control system, then this is initiated by the operator.

54 What can be drawn from *Gemstar* is that having a step that modifies the image, as there clearly was in both the Single Channel and Favorites patents, is not on its own

sufficient to save the application from being excluded as the presentation of information.

- 55 T163/85 (BBC) teaches unsurprisingly that a TV signal defined in terms which inherently comprise the technical features of the TV system, in this instance the proportion of the line period of the signal that contains active video content, is not excluded as presentation of information. I do not see this case as really helping Mr Sessford.
- 56 Mr Sessford also referred to a number of other cases in respect of presentation of information. I do not believe it is necessary to describe them in any great detail. I would simply note that *Cooper's Application*<sup>12</sup> which relates to a newspaper with a longitudinal space in the newsprint to allow folding of the paper and *Fishburn's Application*<sup>13</sup> which relates to a ticket having two separable parts each of which carries the same essential information were both found under previous legislation not be excluded inventions. *American Optical's Application* mentioned above teaches a projector and screen combination where the screen is shaped so as to reduce distortion of the image. None of these cases in my view adds really anything to the analysis of presentation of information in *Gemstar* – though in fairness to Mr Sessford he was merely using these cases just to demonstrate that an invention that included the presentation of information would not be excluded if it also makes a contribution in a field not excluded.
- 57 So what can I conclude? The invention here clearly includes an element of presentation of information. It starts by displaying an image and then allows that image to be modified and then the modified image is displayed. The modified image may indeed be free of “distortion” and this may also provide a better picture for the user. The invention is clearly performed by technical means in the form of a computer and the information displayed and modified relates to technical components in a process control system. But none of that I believe saves the invention. Stepping back and looking at the invention as a whole I can see no technical contribution; the invention in my opinion just relates to the presentation of information in same way that the invention in the Favorites patent did.

### **Auxiliary Claims**

- 58 I turn now to the auxiliary claims. The first auxiliary claims add to claim 1 the step of “controlling, configuring, or maintaining the process plant using the operator display”. I have already indicated that I do not believe that the contribution provided by the invention as a matter of substance extends to how the display is used in respect of the process plant and hence this addition to the claim does not save the application.
- 59 The second auxiliary seek to further restrict claim 1 to using the program at “runtime” and also by limiting the resizing step to the resizing of “a window in which the composite shape is displayed”. This therefore emphasises how the program would most likely be used by the operator monitoring the process plant. For example if the operator wanted to see what was happening at a particular part of the plant he could zoom in on that part by enlarging a window displaying that part. I am not persuaded

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<sup>12</sup> *Cooper's Application* 19 RPC 53

<sup>13</sup> *Fishburn's Application* 57 RPC 245

that this further limitation to the claims helps any more than the first auxiliary claim set. Whether the invention is being used to control or monitor the plant when it is running as opposed to say when the plant is being designed or configured does not really change the nature of the invention. Similarly if the resizing of a composite object is done by resizing a window containing that object as opposed to some other method of selecting the object, then this also does not provide the necessary technical contribution.

### **Decision**

60 I have found that the contribution made by the invention defined by the claims falls solely in matter excluded from patentability by virtue of section 1(2) of the Act, namely a program for a computer and the presentation of information. Furthermore, I have found that the two auxiliary claim sets submitted by the applicant are similarly excluded. I have read the specification carefully and I can see nothing that could be reasonably expected to form the basis of a valid claim. I therefore refuse this application under section 18(3).

### **61 Appeal**

62 Any appeal must be lodged within 28 days

**Phil Thorpe**

Deputy Director, acting for the Comptroller