

that information can become overwhelming leading the user to make errors. Both inventions try to achieve a mechanism for reducing those errors, or making them less likely.

- 6 The claims of GB1505308.5 have not been amended. There are two independent claims, related to a method and a device. There are some differences in wording between the two claims, but Mr Prock made it clear at the hearing that the two claims were intended to relate to the same invention and he was quite content for them to stand or fall together. Claim 1 of GB1505308.5 reads as follows:

*A method for managing and configuring field devices in an automation installation with a configuration tool which is designed to physically detect a field device in the automation installation, to logically incorporate it in the automation installation and to configure it in the automation installation, the configuration tool resorting for this purpose to a predefined field-device-specific information packet which describes the functions and data of the field device and is displayed in an instantiated manner in input windows (11, 11') or dialogs on a display means, wherein:
the input windows (11, 11') of the same device entity and for the same input context are grouped and are displayed in a superordinate group window (10, 10').*

- 7 The claims of GB1505288.9 have been amended. The current claims were filed on 27 May 2016. There are two independent claims, related to a method and a device respectively. Again Mr Prock accepted that the two claims would stand or fall together. Claim 1 of GB1505288.9 reads as follows:

*A method for managing and configuring field devices in an automation installation with a configuration tool which is designed to physically detect a field device in the automation installation, to logically incorporate it in the automation installation and to configure it in the automation installation, the configuration tool resorting for this purpose to a predefined field-device-specific information packet which describes the functions and data of the field device and is displayed in an instantiated manner in input windows (11, 11') or dialogs on a display means, wherein:
the input windows (11, 11') of the same device entity and for the same input context are grouped by a common marking; and
a special operating unit (13, 13') is provided, which operating unit represents the input context and allows the input context to be applied or rejected.*

The law

- 8 Section 1(2) says that certain things are not inventions for the purposes of the Act, as follows (emphasis added):

It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of –

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

- 9 The test to be applied when determining whether an invention related to excluded matter is that laid down by the Court of Appeal in its judgement in *Aerotel/Macrossan*¹ as further interpreted in the light of the judgement in *Symbian*².
- 10 The *Aerotel/Macrossan* test comprises four steps:
- (1) Properly construe the claim*
 - (2) Identify the actual contribution*
 - (3) Ask whether it falls solely within the excluded matter*
 - (4) Check whether the actual or alleged contribution is actually technical in nature.*
- 11 In its judgment in *Symbian* the Court made clear that the *Aerotel/Macrossan* test is not intended to provide a departure from the previous requirement set out in case law, namely that the invention must provide a “technical contribution” if it is not to fall within excluded matter. Thus in deciding whether the invention is excluded as a program for a computer as such I must ask whether it makes a technical contribution.
- 12 The Courts have also provided additional guidance as to what constitutes a “technical contribution” in the form of the “AT&T signposts” which in their latest form³ read as follows:
- i) whether the claimed technical effect has a technical effect on a process which is carried on outside the computer;*
 - ii) whether the claimed technical effect operates at the level of the architecture of the computer; that is to say whether the effect is produced irrespective of the data being processed or the applications being run;*
 - iii) whether the claimed technical effect results in the computer being made to operate in a new way;*

¹ *Aerotel Ltd v Telco Holdings Ltd Macrossan's Patent Application* [2007] RPC 7

² *Symbian Ltd's Application* [2008] EWCA Civ 1066, [2009] RPC 1

³ As modified by the Court of Appeal in *HTC Europe Co. Ltd. v Apple Inc.* [2013] RPC 30

- iv) *whether a program makes a computer a better computer in the sense of running more efficiently and effectively as a computer*
- v) *whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented*

13 Arguments and analysis

Construing the claims

- 14 I do not think this presents any real problems as both the applicant and examiner appear to agree as the meaning of the claims. Mr Prock confirmed this at the hearing.

Identify the actual or alleged contribution

- 15 Mr Prock pointed out that in both cases the examiner had asserted that nothing at all had been added to the stock of human knowledge, and commented that he found it difficult to agree with this as it was an allegation which had not been substantiated with evidence. He contended that something had indeed been added to the stock of human knowledge; there was, after all, a problem severe enough that the inventor had spent time and effort in doing something about it. I do have some sympathy with Mr Prock's argument, but as I observed at the hearing it may not be necessary, or even possible, to identify the actual contribution in these circumstances. Rather, it is sufficient to identify the alleged contribution⁴ based on what the inventor says.
- 16 So what is the alleged contribution? Mr Prock says it is "providing a framework that allows the reduction of errors", or as he alternatively put it "a framework that makes it less likely that errors are made". He acknowledged that the claims in the two applications provide two different ways of facilitating this reduction of errors. I am quite prepared to accept this as a broad overview of the contribution, or perhaps as an advantage of the invention, but in my view a more detailed characterisation is required in order to identify what has been contributed by the invention. In particular, one may need to consider what this framework is for, what it actually is, what the errors are, and how the framework allows for the reduction of those errors.
- 17 While Mr Prock offered little else at this point in the hearing to add context to his assertion that the contribution is a framework, he did discuss the problem to be addressed when considering the *AT&T* signposts at a later point, however I believe it would be helpful to consider these submissions in relation to identifying the contribution.
- 18 Mr Prock argued that the perceived problem is not to reduce errors per se, pointing out that reduction of errors is never claimed, but to provide a framework that helps the user to reduce errors.
- 19 Turning to the descriptions, each recognises the difficulty that an end user may have in discerning and/or assigning information within prior art systems due to the

⁴ Aerotel Ltd v Telco Holdings Ltd Macrossan's Patent Application [2007] RPC 7, at paragraph 44

complexity of the way the information is presented. The inventions at hand provide a clear way for information to be assigned.

- 20 I agree with Mr Prock insofar as providing a better framework should help the user to reduce errors, but disagree that the reduction of errors is not at least part of the problem to be addressed.
- 21 Taking in account the claims, as construed, and Mr Prock's assessment of the contribution, I consider the contribution in '308.5 to be "a framework to display information which describes the functions and data of field devices of an automation installation in input windows on a display means, grouping together input windows of the same device and for the same input context and displaying them in a superordinate group window so as to reduce the likelihood of a user making an error based on the displayed information".
- 22 Similarly I consider the contribution in '288.9 to be "a framework to display information which describes the functions and data of field devices of an automation installation in input windows on a display means, grouping together input windows of the same device and for the same input context by a using common marking so as to reduce the likelihood of a user making an error based on the displayed information".

Ask whether it falls solely within the excluded matter/is the contribution technical in nature

- 23 The examiner has objected to both applications on the grounds that they relate to both a computer program and to presentation of information. Mr Prock addressed me on both of these issues, and I will therefore address both in my decision.
- 24 With regard to the issue of whether the claimed invention falls solely within the computer program exclusion Mr Prock observed that the fact that an invention is implemented in computer software is not an obstacle to patentability. I agree; indeed the *AT&T* signposts provide useful guidance on when a computer program can be said to have a "technical contribution" such as to render it patentable.
- 25 Mr Prock drew my attention only to the fifth of these signposts in support of why the claimed inventions should fall outside of the exclusions i.e. the question of whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented. The examiner argues that nothing technical is done that results in field devices being managed or configured in any different way so as to reduce errors. In other words the examiner argues that the perceived problem hasn't been overcome. Mr Prock did not consider that this was relevant, pointing out that reduction of errors is never claimed. As stated above, Mr Prock argued that the perceived problem is not to reduce errors *per se* but to provide a framework that helps the user to reduce errors, and that *that* problem has been solved, and not circumvented.
- 26 In the absence of any other indications as to why the contribution is technical it is helpful to consider whether the invention might be regarded as solving a problem that is, in itself essentially technical, rather than whether the problem has been solved or circumvented.

- 27 An invention which solves a technical problem within a computer or outside a computer may not be excluded from patentability⁵. Contrary to Mr Prock's line of argument I do not think that a user being overwhelmed with so much information that he is liable to make mistakes is a technical problem. Indeed at one point Mr Prock admitted "if you were to concentrate really quite well and presumably take your time then there is no reason why it [managing and configuring field devices] shouldn't work". Furthermore providing the information in a framework which makes it clearer to the user is not to my mind a technical problem for which the claimed inventions provide a technical solution.
- 28 With this in mind I do not believe solving the problem, be it the problem as identified by the examiner or as identified by Mr Prock, is on its own sufficient to provide the technical contribution required to avoid the exclusions.
- 29 The overriding question that must be answered, of course, is this - is the identified contribution technical? I put that question to Mr Prock at the hearing. In response Mr Prock referred me to Court of Appeal's judgement in HTC v Apple⁶. The invention in HTC v Apple deals with the problem of handling touch events on a multi-touch device by associating particular flags with views on the screen which indicate whether a particular view can receive multiple simultaneous touches and whether a particular view allows other views to receive touches when it is receiving a touch. This has the effect of making it easier to program the device. Mr Prock submitted that the contribution in HTC v Apple of "making programming easier" was analogous to contribution here of "providing a way of reducing errors" since there is conceptually no difference between the two; if the one is technical, then the other must also be technical.
- 30 In HTC v Apple the contribution concerned the basic internal operation of the device⁷ and resulted in an improved device in a real practical sense⁸. That is, the second and third signposts AT&T were relevant. I do not think the same can be said here. The contribution lies in the manner in which information is provided to a user, and not in the internal operation of the device which provides the information. The device is not an improved device in any real sense. Indeed, Mr Prock confirmed that he was not relying on any of the first four AT&T signposts. This reinforces my view that the problem and its solution in HTC v Apple are clearly differentiated from those here. I therefore cannot agree with Mr Prock's that the contribution here is not excluded because it is so similar to that in HTC v Apple.
- 31 Having considered all the evidence made available to me, and all the arguments put to me at the hearing, I do not consider the inventions as claimed in GB1505288.9 and GB1505308.5 to provide the necessary technical contribution and fall squarely in the exclusions of section 1(2).
- 32 The inventions are clearly implemented by means of a computer program and as such they are excluded under section 1(2) as a computer program.

⁵ HTC Europe Co. Ltd. V Apple Inc. [2013] RPC 30, at paragraph 49

⁶ HTC Europe Co. Ltd. V Apple Inc. [2013] RPC 30

⁷ See paragraph 57 of HTC v Apple

⁸ See paragraph 58 of HTC v Apple

33 Mr Prock argued that the inventions cannot be excluded as mere presentation of information since they are not about the information which is displayed per se, but rather the framework in which the information is displayed. I have sympathy with Mr Prock's argument as it is well established that an invention will not fall foul of this exclusion if the invention makes a technical contribution beyond the information being displayed. However, as I have already found above that the identified contributions of the inventions are not technical, the inventions are therefore also excluded under section 1(2) as the presentation of information as such.

Conclusion

34 I find that the inventions as currently claimed in both applications are excluded under section 1(2) of the Act as they relate to a computer program and presentation of information.

35 Having reviewed the specification I do not consider that any saving amendment is possible. I therefore refuse the application under section 18(3).

36 Appeal

37 Any appeal must be lodged within 28 days after the date of this decision.

J Pullen

Deputy Director, acting for the Comptroller