

BL O/163/13 24 April 2013

PATENTS ACT 1977

APPLICANT	The Washington Post Company
ISSUE	Whether patent application number GB 1018114.7 complies with section 1(2)

HEARING OFFICER C L Davies

DECISION

- 1 This decision concerns the issue of whether the invention claimed in UK patent application GB 1018114.7 relates to non-excluded subject matter as required by section 1(2) of the Patents Act 1977 (the Act).
- 2 The application, entitled "Information display system based on user profile data with assisted and explicit profile modification", was filed in the name of iCurrent Inc. as PCT Application PCT/US2009/039358 on 2 April 2009, claiming priority from US Patent application number 61/042168, filed 3 April 2008. The PCT application was published by WIPO with the publication number WO 2009/124212 on 8 October 2009. The application subsequently entered the national phase as GB application number 1018114.7 and was re-published on 29 December 2010 as GB 2471432 A. The application was then assigned to The Washington Post Company (the applicant).
- 3 During the course of substantive examination, the applicant has been unable to convince the examiner that the application is novel under section 2 of the Act or patentable under section 1(2) of the Act, with the examiner maintaining throughout that the invention relates to a computer program, a method of doing business, and/or the presentation of information, as such. Despite several of rounds of amendments, the applicant and the examiner were unable to resolve these issues and it came before me, at a hearing on 27 February 2013, to decide. The applicant was represented by their attorneys, Mr David Horner and Dr Alan Boyd from D Young & Co. The examiner, Dr Stephen Richardson, and hearing assistant, Mr Andy Hole, also attended.
- 4 On 20 February 2013, a week before the hearing was due to take place, the applicant filed skeleton arguments, for which I am grateful, and a revised set of claims as proposed amendments. The examiner considers that these proposed amendments would *prima facie* overcome the novelty objection and would appear to involve an inventive step over the previously cited prior art and subject, of course, to

the updating search being carried out. The applicant was informed of this and at the hearing Mr Horner requested that the proposed claims be considered as having been formally filed. This meant that the claim set filed on 20 February 2013 was used at the hearing and in this decision. The use of this new claim set further meant that patentability under section 1(2) was the only issue to be decided. (It should be noted that a Form 52, filed 25 January 2013, extended the rule 30 period to 31 March 2013.)

The application

- 5 The invention of the present application relates to retrieving, analyzing and delivering information using user profiles that are explicitly edited by the user, and tools for facilitating the creation and editing of such profiles by users in an interactive, computer implemented process.
- 6 More particularly, the invention relates to a server system for servicing requests from a user for articles of interest. There is a large computer-based repository of information files and associated metadata. The claimed invention is directed to a data processing system which selectively accesses that information and produces a set of results to be provided to the user.
- 7 The invention allows a user to define their own "channels" for a webpage, each of the channels relates to content which the user is interested in. The channels are represented in the user profile as a number of named-interest nodes, each of which comprises a set of targets and qualifiers which are also selectable by the user. When the user requests content, data is retrieved from a store of information files at a server using a filtering process.
- 8 The filtering process used by the invention is a two-stage process, the first stage using the targets which the user has set for the selected channel to give a first set of filtered results and a second stage using the qualifiers which the user has set, the second stage being conducted on only those filtered results obtained from the first filtering stage. This gives a number of files which have been filtered for presentation to the user as part of their channel.
- 9 A representation of the filtered set of information files is included in executable documents which are sent to a user terminal for presentation to the user. The representation further includes user selectable mark-up associated with metadata related to the information files. Also included in the executable documents for presentation to the user is a representation of the profile data structure.
- 10 The invention allows messages relating to any user selected mark-up to be returned to the server in order for the named interest node to be updated so that the user's channel is modified in accordance with the user's selected mark-up. For example the user may request stories about a certain topic to be included in their channel or request that stories from a particular source are not included in their channel.

The claims

11 As discussed in paragraph 4 above, the claim set filed by the applicant on 20 February 2013 formed the basis for the hearing. There are 29 claims in total, two of which are fully independent claims. Independent claims 1 and 14 read as follows:

1. A data processing system, comprising:

storage to store information files and associated metadata, the metadata indicating information about the associated information files, said metadata including typed-attributes usable in processing the information files;

a database including a plurality of user records, each user record including respective profile data structures, the profile data structures having a plurality of named interest nodes, which are user-definable and user-tunable channels, each named interest node having a data structure comprising a set of targets and a set of qualifiers, wherein

a target comprises a typed-attribute for identifying entities named in the information files to be included in the user-tunable channel; and a qualifier comprises a typed-attribute usable by an algorithm for ranking, filtering and composing the user-tunable channel;

for each named interest node within one of said user records, the target and qualifiers forming that named interest node being selectable by the associated user;

logic executable to process the information files and associated metadata in response to an indication by a user of a selected named interest node selected from the plurality of named interest nodes within that user's user record, to produce a filtered set of information files using said set of targets in said selected named interest node during a first filtering step and said set of qualifiers in said selected named interest node during a second filtering step performed on the information files produced by said first filtering step;

logic executable to compose and send executable documents via a network interface according to a communication protocol to a user terminal for rendition of a graphical user interface at a user terminal, the graphical user interface including a representation of the profile data structure and the names of the associated named interest nodes, wherein the executable documents comprise data specifying a representation of the filtered set of information files and a representation of user selectable mark-up identifying typed-attributes represented by said metadata associated with the filtered set of information files; and

logic to receive messages via a network interface according to a communication protocol indicating selection of particular mark-up in the graphical user interface at the user terminal, and executable to modify the selected named interest node, which is a user-definable and user-tunable channel, in response to said messages to add at least one of a target and a qualifier corresponding to the typed-attribute identified by the particular markup.

14. A computer-implemented method for processing information files, said method comprising:

storing information files and associated metadata in computer readable storage, the metadata indicating information about the associated information files, said metadata including typed-attributes usable by logic to process the information files;

storing a profile data structure in a database having a plurality of named interest nodes, which are user-definable and user-tunable channels, each named interest node having a data structure comprising a set of targets and a set of qualifiers, wherein

a target comprises a typed attribute for identifying entities named in the information files to be included in the user-tunable channel; and a qualifier comprises a typed-attribute usable by an algorithm for ranking, filtering and composing the user-tunable channel;

for each named interest node within one of said user records, the target and qualifiers forming that named interest node being selectable by the associated user;

processing the information files and associated metadata in response to an indication by a user of a selected named interest node selected from the plurality of named interest nodes within that user's user record, said processing comprising filtering the information files and metadata using said set of targets in said selected named interest node during a first filtering step and said set of qualifiers in said selected named interest node during a second filtering step performed on the information files produced by said first filtering step to produce a filtered set of information files, by executing a procedure on a data processing system in communication with the storage and the database;

composing, using the data processing system, a first executable document for rendition of a graphical user interface, including a representation of the filtered set of information files with user selectable mark-up identifying typed-attributes represented in the filtered set of information files, a representation of the profile data structure, and the names of the associated named interest nodes;

sending said first executable document on a data network across a data network from the data processing system to a user terminal;

modifying, using the data processing system, the selected named interest node, which is a user-definable and user-tunable channel, in the profile data structure in response to an indicated selection of a particular mark-up by adding at least one of a target and a qualifier corresponding to the typed-attribute identified by the particular mark-up;

composing, using the data processing system, a second executable document for rendition of a graphical user interface using said modified named interest node; and

sending said second executable document across the data network for the data processing system to the user terminal.

Issue to be decided

12 As noted above, the issue before me to decide is whether the claims satisfy section 1(2) of the Patents Act 1977. However, I note that the "top-up" search has been deferred pending outcome of this decision on patentability. Consequently, should I find in favour of the applicant I will need to remit this application to the examiner for further consideration.

The law and its interpretation

13 Section 1(2) of the Patents Act 1977 sets out various things are not considered to be inventions for the purposes of the Act, as follows:

"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."

- 14 These provisions are designated in Section 130(7) as being so framed as to have, as nearly as practicable, the same effect as Article 52 of the European Patent Convention, to which they correspond. I must therefore also have regard to the decisions of the European Boards of Appeal that have been issued under this Article in deciding whether the present invention is patentable.
- 15 However, in the UK the assessment of patentability under section 1(2) is governed by the judgment of the Court of Appeal in *Aerotel*¹. In this judgment, the court reviewed the case law on the interpretation of section 1(2) and approved a four-step test for the assessment of "excluded matter", as follows:

Step one: properly construe the claim

Step two: identify the actual contribution (although at the application stage this might have to be the alleged contribution)

Step three: ask whether it falls solely within the excluded matter

Step four: check whether the actual or alleged contribution is actually technical in nature.

16 The operation of the test is explained at paragraphs 40-48 of the judgment. Subsequently, the Court of Appeal in *Symbian*² made clear that the *Aerotel* test is not intended to provide a departure from the previous requirement set out in case-

¹ Aerotel Ltd. v Telco Holdings Ltd & Ors Rev 1 [2006] EWCA Civ 1371 (27 October 2006)

² Symbian Ltd v Comptroller General of Patents [2008] EWCA Civ 1066 (08 October 2008)

law, such as *Merrill Lynch*³, *Gale*⁴ and *Fujistu*⁵, namely that the invention must provide a "technical contribution" if it is not to fall within excluded matter.

17 Mr Horner accepted at the hearing that the *Aerotel* test was the approach that had to be followed to assess whether or not the invention was patentable.

Application of the Aerotel test

First step: properly construe the claim

- 18 At the hearing it was agreed that there was no difficultly or disagreement in the construction of either of the independent claims. The independent claims both define a data repository in which the information files and their associated metadata are stored and a data processing system and method which is used to selectively retrieve information files from the repository using the defined method and providing a set of results back to the user in the form of an executable document transferred across a network. There is a database of user records each having a profile data structure comprising a number of named interest nodes which are related to the individual user, the named interest nodes being user-definable and user-tunable. This means that a user is free to create a channel on any subject, or subjects, they wish, based on their interests. The nodes each have a data structure comprising targets and qualifiers, both of which are selectable by the user as defined in the claims. This means that the user can create a channel such as "Things I like to view each day" and select news sites, blogs, web cartoons, etc. that the user wishes to see every day. Therefore, the user can tailor his request for content.
- 19 The claims then define the process used to search for information on the database in accordance with the user's preferences. When a user selects one of their named interest nodes a filtering process on the information files is carried out based upon the targets defined in association with that named interest node. This search returns a first, or intermediate, set of results. Then a second filtering process is carried out on the first set of results using the qualifiers associated with the same selected named interest node. This gives a final set of information files that are to be presented to the user, based upon their interests. For instance, if the user has shares in a particular company, then their named interest node may define the company and particular information sources from which they are interested in obtaining information about that company.
- 20 The claims then go on to define a presentation and feedback sequence that allows the final set of information files to be presented to the user and for the user to further tune their channel by changing the targets and qualifiers that comprise the particular named interest node. The presented graphical user interface has a representation of the user's profile data structure and also a representation of mark-up that allows the user to select the metadata of the individual information files in order to allow the user to further refine the named interest nodes of their user record. For instance a user may decide that they are not interested in stories about a particular topic or

³ Merrill Lynch's Application [1989] R.P.C. 561

⁴ Gale's Application [1991] R.P.C. 305

⁵ Fujitsu's Application [1997] R.P.C. 608

from a particular source and may select mark-up on the user interface to feed this back to the filtering system via their user record.

Second step: identify the actual or alleged contribution

21 It is at this step that disagreement between the examiner and the applicant arose. In the pre-hearing report, the examiner considered the following to be the contribution made by the invention, at least in relation to claim 14:

"[A] computer program or programs which, when executed, personalise information for presentation to a user by:

filtering stored information files (having associated metadata) using a stored user profile, the profile comprising "interest nodes" including "targets" (information of interest) and "qualifiers" (information for filtering and ranking information files); composing a document, for rendering at a user interface, the document including a representation of the filtered files along with user-selectable mark-up that allows the user provide input for editing the user profile;

receiving user input to edit the user profile, e.g. by adding targets/qualifiers; and composing another document, for rendering at the user interface, using the edited user profile."

22 At the hearing Mr Horner reminded me that the test requires me to determine the contribution of the whole claim, looking at substance over form. Mr Horner put forward the following as the contribution of the invention as a whole:

"A more process-efficient search system which improves the system performance and reduces the internal memory requirements of the system, enabling the handling of more user requests concurrently."

- In support of this Mr Horner stated that the search is a more targeted search, based on what a specific user is interested in. He also stated that the invention uses a twostage search process so when a user selects a specific named interest node from their user record, an initial search is carried out using the targets identified in that named interest node. This first search (first filtering action) was said to be quick and very effective in reducing the amount of information files under consideration for the second search (second filtering action). The intermediary result given by the first search was also said to have a significantly reduced internal memory requirement. The use of a two-stage filtering process also means that the second filtering step, which is more complex, is only performed on the intermediary result.
- 24 Mr Horner says that a service provider that has a large volume of data and is receiving a large number of requests for information from users is constrained by the capabilities of their server. He put forward that anything which increases the overall efficiency of the server results in an improved server since it can process more user requests concurrently.
- 25 As previously stated in his letters, Mr Horner also maintained that the invention provides the more efficient usage of network resources as an additional benefit that the invention is said to provide. In earlier correspondence with the examiner the applicant has stated that because the invention allows the user to tailor information to their preferences, it means that information which the user is not interested in is

not transmitted across the network, meaning that overall network resources are reduced.

26 In response to the examiner's comments that there is no explicit statement in the description that the invention provides the contributions given above, Mr Horner made it clear that there is no requirement in the Act or Rules for an explicit statement of any problem solved by the invention. However, Mr Horner directed me to lines 29-31 of page 1 of the present description where it is mentioned that a prior art system which used a form of user preference filtering actually harmed system and user performance:

"Ahn et al, found however that providing a user the ability to add and remove keywords typically harms system and user performance in information retrieval systems."

- 27 Thus Mr Horner stated that system performance is identified as an issue in the present specification. Mr Horner also stated that the skilled addressee would understand that the performance of a server that processes user requests was a significant issue and that there are many ways in which server performance can be improved, with the present invention being one of those ways.
- 28 Whilst Mr Horner conceded that more or less information could be provided to a user, based on their selected targets and qualifiers, depending on the nature of these targets and qualifiers, he was firm that the invention was more efficient than the prior art for any particular search, being quicker, using less memory space and being able to handle more concurrent user requests than the searches of the prior art.
 - 29 For my part, I note paragraph 43 and 44 of the Aerotel judgment which discuss what the second step entails:

"43. The second step – identify the contribution - is said to be more problematical. How do you assess the contribution? Mr Birss submits the test is workable – it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are. What has the inventor really added to human knowledge perhaps best sums up the exercise. The formulation involves looking at substance not form – which is surely what the legislator intended.

44. Mr Birss added the words "or alleged contribution" in his formulation of the second step. That will do at the application stage – where the Office must generally perforce accept what the inventor says is his contribution. It cannot actually be conclusive, however. If an inventor claims a computer when programmed with his new program, it will not assist him if he alleges wrongly that he has invented the computer itself, even if he specifies all the detailed elements of a computer in his claim. In the end the test must be what contribution has actually been made, not what the inventor says he has made."

30 As noted above, Mr Horner has pointed out that the prior art mentions problems with systems which provide the user-customisation of displayed content. The present description also states, at paragraph 4 of the description of WO 2009/124212, that:

"It is desirable therefore to provide personalization technologies based on open profiles which can be modified by users, in a way that actually improves the results of the information filtering and presentation systems."

So the problem that the invention actually addresses is concerned with providing improved results of an information filtering process based on a profile that can be modified by the user.

- 31 How the invention works is the next stage of the second step. From the claims and the applicant's submissions it is clear that the feature which is considered to be critical to the working of the invention is the two-stage filtering process described above where a first filtering process, based upon user-defined targets, provides intermediary results on which a second filtering process, based upon user-defined qualifiers, is carried out.
- 32 The applicant maintains that the invention provides the advantages of a more process-efficient searching system, improving system performance and reducing the internal memory requirements of the system so enabling the handling of more user requests concurrently. The invention is also said to provide more efficient use of network resources given that only information of interest to the user is transmitted across the network.
- 33 I am not convinced that either of the contributions put forward to me represent the actual contribution that the claimed invention makes. Taking both the examiner's contribution and the applicant's contribution, and their respective comments, in to account, I believe that the actual contribution that the invention as a whole makes is:

In a data processing system, executing a computer program or programs which personalise information for presentation to a user by:

filtering stored information files having associated metadata using a stored user profile, the profile comprising named interest nodes including targets and qualifiers and a two-stage filtering process as defined in the claims;

composing a document, for rendering at a user interface, the document including a representation of the filtered files along with user-selectable mark-up that allows the user provide input for editing the user profile;

receiving user input to edit the user profile;

the computer program providing improved system performance and reduced internal memory requirements for the system, enabling the handling of more user requests concurrently.

Third step: Ask whether the contribution relates solely to excluded matter

- 34 Having identified the actual contribution above, I must now determine whether it relates solely to excluded matter.
- 35 When considering the third step, it was agreed at the hearing that the judgment in AT&T Knowledge Ventures LP^6 (AT&T), and in particular the "signposts" noted by

⁶ AT&T Knowledge Ventures LP, Re [2009] EWHC 343 (Pat)

Lewison J, is useful. These "signposts" were developed having consideration of past case law and are 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;

iv) whether there is an increase in the speed or reliability of the computer;
 v) whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

- 36 Mr Horner made me aware that these signposts, while useful, are not an exhaustive list of patentable technical effects.
- 37 Mr Horner maintained that the contribution as a whole that he had identified did not solely relate to the excluded matter. In support of this, Mr Horner explained to me that signpost 3, "whether the claimed technical effect results in the computer being made to operate in a new way", was met by the novel two-stage filtering process of the invention. This is because the invention gives the improvements mentioned above in terms of a reduced working memory requirement, providing search results more quickly as would be appreciated by a worker skilled in the art of database searching, which overall causes the system to operate more efficiently so more users can be handled concurrently.
- 38 Mr Horner stated that signpost 4, "whether there is an increase in the speed or reliability of the computer", as developed from the *Symbian* judgment, is also satisfied because the speed of the server is increased by the invention.
- 39 Signpost 1, "whether the claimed technical effect has a technical effect on a process which is carried on outside the computer", Mr Horner also argued, was also met because the nature of the search carried out by the invention leads to a greater efficiency of network resource usage and more users being handled concurrently.
- 40 However, since I have found the actual contribution to be different to that put forward by Mr Horner, I must apply the signposts to the contribution that I have identified above. I will take the signposts in turn.

Signpost 1: Whether the claimed effect has a technical effect on a process which is carried on outside the computer.

41 I am not convinced that there is any technical effect on a process carried on outside of the computer. The more efficient usage of network resources is not a process carried out outside of the computer, it is still internal to the computer system as a whole. The present invention does not result in less information being transferred from the server to the user device but rather that the information which is transferred is tailored in accordance to the user's preferences. Therefore it is my opinion that my contribution does not satisfy this signpost.

Signpost 2: 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.

42 This signpost was not discussed at the hearing, but for the sake of completeness, I feel I should briefly mention it. There is no argument in relation to this step. The contribution I have identified obviously does not operate at the level of the architecture of the computer. The contribution does not change the way in which the computer operates regardless of the task that the computer is carrying out. The contribution specifically relates to the retrieval of information files for presentation to a user in accordance with user preferences as stored in a user record found in a database. This points to this signpost not being fulfilled.

Signpost 3: Whether the claimed technical effect results in the computer being made to operate in a new way.

- 43 In order to satisfy this signpost there must be more than running a different program on a computer. Merely running a different program on an otherwise normal, general purpose, computer is not enough, the program must do more than that. There must be something about the underlying computer that is changed, that the computer itself is made to operate in a different way.
- 44 The present computer does not operate in such a new way, it is a standard computer that is programmed to carry out the invention. There is no indication of a technical effect on the computer by running the program. This signpost is also considered to point to a lack of a technical contribution.

Signpost 4: Whether there is an increase in the speed or reliability of the computer.

- 45 The invention at suit in the *Symbian* judgment was allowable as it made a difference to the reliability of the computer, and also increased the speed of the computer. Although Mr Horner has attempted to draw an analogy between the present invention and that of *Symbian*, I do not find the analogy to be convincing. There is a simple reason for this. The invention of *Symbian* provided the advantages independently from the program application or task that the computer was used to perform. That is to say the invention of *Symbian* gave the advantages no matter what the computer was used to do. The same is not true of the present invention.
- 46 There is no evidence that the data processing system (server) executing the present invention will actually be a faster computer in itself. The two-stage filtering process of the present invention may well be faster than previous filtering processes but that is not the same as providing a faster computer: it is merely a program that is better than previous programs.
- 47 With respect to the reduced internal memory requirements for the system, which is another part of the contribution, this too is simply a result of a better program and the advantage is only applicable to a computer carrying out the task of the contribution. It does not result in a better computer per se. Again, it is my opinion that this signpost is not satisfied.

Signpost 5: whether the perceived problem is overcome by the claimed invention as opposed to merely being circumvented.

48 This signpost was not discussed at the hearing but, for completeness, I will give consideration to it. The problem said to be overcome is that providing a user with some degree of personalisation through the use of keywords can harm system and user performance in information retrieval systems, as noted with respect to the Ahn et al. document mentioned in above. The problem would be solved by providing a better system that could process more data and has increased network transmission speed or efficiency, regardless of the nature of the data being processed or transferred. The present invention does not address these issues but instead provides a different customisation method, using targets and qualifiers for each named interest node, and a two-stage information file filtering method. Therefore the problem is being circumvented by the use of a different computer program rather than being overcome through some fundamental change in the data processing system or network. Hence, I find that this signpost is not met.

Conclusion regarding the AT&T signposts

- 49 Therefore none of the five AT&T signposts are satisfied.
- 50 However, I must remember that the signposts are just a guide and are not exhaustive. Therefore I should ask whether the contribution I have identified as a whole relates solely to excluded matter independent from the signposts.
- 51 There is no doubt that the contribution relates to a computer program. The benefits are those that are to be expected from a better computer program for completing a specific task. As noted in the judgment of *Aerotel* when considering *Gale*, the more efficient use of computing resources is not in itself enough to escape the computer program, as such, exclusion. More is required beyond there being a better program. It is this that I feel the present contribution lacks because the contribution does not give a better computer irrespective of the task completed by the computer. There is no general improvement that is over and above a better computer program for completing a specific task. Therefore the contribution as a whole relates solely to excluded subject matter as it is no more than a program for a computer, as such.
- 52 At the hearing, two other excluded categories were briefly mentioned: schemes, rules and methods for doing business and the presentation of information. However, the examiner expressed the opinion that these were secondary objections and that the invention was probably more than just the presentation of information. Having found the contribution to be excluded as a computer program, as such, I will not go on to consider whether the contribution is also excluded as a scheme, rule or method for doing business, as such, or the presentation of information, as such.

Step four: check whether the actual or alleged contribution is actually technical in nature.

53 Mr Horner was satisfied that his arguments in relation to step three showed that there was a technical contribution and offered no further comment with respect to step four.

54 For the reasons given above, I am not in agreement with the applicant and have found that the contribution lies solely within excluded matter. The contribution is not technical in nature.

Conclusion

55 Having given full consideration to the arguments presented by Mr Horner and Dr Boyd at the hearing, as well as the previous written arguments and the examiner's objections to the previous claims, I conclude that the claims before me define a nonpatentable invention which falls within the program for a computer, as such, exclusion of section 1(2)(c). I do not believe that there is any matter in the rest of the specification as a whole which could be added to the claims in order to give a patentable invention. I therefore refuse the application under section 18(3) for failing to comply with section 1(2)(c).

Appeal

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

C L Davies

Deputy Director, acting for the Comptroller