

PATENTS ACT 1977

APPLICANT	PET Technology Store limited
ISSUE	Whether patent application GB1110449.4 complies with sections 1(1)(b), 1(2) and 76(2)
HEARING OFFICER	S Brown

DECISION

Introduction

- 1 This decision concerns the issue of whether the invention claimed in patent application GB1110449.4 contains added matter, relates to excluded subject matter, and/or lacks an inventive step over the prior art. It is entitled “Animal identification system and related method”, and was filed with a priority date of 8th December 2008. The application was published on 16th November 2011 as GB 2480390 A.
- 2 The examiner has maintained throughout that the invention claimed in this application lacks an inventive step and is excluded from patentability as a business method as such. Added matter has also been an issue in a number of examination reports. Despite several rounds of amendment the applicant and the examiner have been unable to agree. A Hearing was thus held via telephone conference on 30th June 2014 to decide the matter. The Applicant was represented by Mr Neville Walker of IP Consult.

The invention

- 3 The most recent set of claims were filed on 10th April 2014. There are 9 claims, which contain a single independent claim and two omnibus claims. Claim 1 relates to a system for identifying lost or stolen animals. The invention attempts to overcome the problem of maintaining the anonymity of pet owner’s personal data due to data protection regulations in different jurisdictions and/or the owner’s wishes whilst providing a means for reuniting lost/stolen pets with their owners. Claim 1 reads as follows:

A system for identifying lost or stolen animals comprises: a local database arranged to contact, and receive data from, at least one other database; a means for processing received data at the local database so that the processed data includes a unique identity code of an identification tag/transponder device of the type implanted in an animal and data, in an encoded form as to maintain

anonymity of a pet owner's personal data; a means for deriving a list of microchip numbers of stolen and/or missing animals from the encoded data; and a transmitter that transmits the list of microchip numbers to a plurality of hand-held devices, each hand-held device comprises: a means for reading a signal from a tag/transponder surgically implanted in an animal's tissue, a power supply, a dynamic memory for storing the list of microchip numbers, a comparison means for comparing the signal obtained by the means for reading, with the stored list of microchip numbers and a means for providing an indication to the user of the hand-held device when a signal is obtained from a lost/stolen animal, characterised in that a link is provided from the encoded data to the name and/or identity of the database from where the original notification originated so as to reunite the owner with a pet once found.

- 4 As mentioned above in paragraph 2 the issues before me concern added matter, excluded matter and inventive step. I shall assess each of these in turn.

Added matter

The law and its interpretation

- 5 Section 76(2) of the Act reads:

No amendment of an application for a patent shall be allowed under section 15A(6), 18(3) or 19(1) if it results in the application disclosing matter extending beyond that disclosed in the application as filed.

- 6 In her last report the examiner identified three things in claim 1, as amended on 10th April 2014, that she considered were not supported by the application as filed. The matter identified was:

(i) a means for processing received data at the local database so that the processed data includes a unique identity code of an identification tag/transponder device of the type implanted in an animal and data, in an encoded form as to maintain anonymity of a pet owner's personal data;

(ii) a means for deriving a list of microchip numbers of stolen and/or missing animals from the encoded data; and

(iii) a transmitter that transmits the list of microchip numbers to a plurality of hand-held devices

- 7 Naturally, Mr Walker argued that the matter identified above was supported by the application as filed. He referred me to a number of passages in the description along with figures 2 and 3 as providing the necessary support.

- 8 Viewing the application as filed through the eyes of the skilled addressee, I agree with Mr Walker that there is support for a system having a means to process data so as to create a list of identification numbers relating to tags/transponders implanted in lost/stolen animals. Furthermore, it is disclosed that the list only contains the unique tag identification numbers with no personal data of the owner included thereby

maintaining the anonymity of the owner. That much is clear to me from lines 24 to 30 on page 10 of the description when considered in the context of the description as a whole.

- 9 Mr Walker also highlighted lines 11 to 14 on page 4 of the application as filed where the stored data is described as being stored on a database in an encoded form which links the owner's personal details with the unique identification code of the identification tag/transponder.
- 10 I thus consider that *almost* all of part (i) above is supported by the application as filed. However, I construe this part of the amended claim 1 to also require the processing of the data, to produce both the unique identity codes and the encoded owner personal data, to take place after reception at the local database. I am afraid that I cannot see any support in the application as filed, either explicit or implicit, for this feature. I thus consider this part of claim 1 to constitute added matter.
- 11 Moving on to part (ii), as identified above, I agree with Mr Walker that there is support for the creation of a list containing only the unique identification numbers of stolen and/or missing animals. For example, lines 5 to 7 on page 12 of the description describe uploading new lists of numbers to overwrite old lists on the hand-held devices via the internet. This clearly implies a list creation step in order to provide new lists at regular intervals.
- 12 However, as amended, claim 1 requires that the list of numbers is derived from data encoded in the manner defined in part (i) above. I cannot see any support in the application as filed for this specific step. I thus conclude that part (ii) constitutes added matter.
- 13 Next I will consider part (iii). I agree with Mr Walker that the application as filed does disclose that lists of identification numbers relating to lost/stolen animals can be uploaded from a database to remote hand-held scanners via the internet at regular intervals. Whilst the application as filed does not contain an explicit reference to a "transmitter", I consider it is implicit that the system has some means of transmitting its lists of numbers to the remote hand-held scanners. Thus I consider part (iii) to be supported by the application as filed and as such not to constitute added matter.
- 14 Overall though, I conclude that claim 1, as amended, does include added matter. Specifically, the steps of processing data after reception at the local database to produce both the unique identity codes and the encoded owner personal data and then using the encoded data to derive a list of microchip numbers of stolen/missing animals. These steps were not present in the application as filed and so amended claim 1 falls foul of section 76(2).

Excluded Matter

The law and its interpretation

- 15 Section 1(2) of the Act reads:

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:

...

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

...

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.

- 16 In addition to the above, there is also the case law established in the UK in Aerotel/Macrossan¹, and further elaborated in Symbian² and AT&T/CVON³, which I am bound to follow. In Aerotel/Macrossan the Court of Appeal reviewed the case law on the interpretation of section 1(2) and approved a four-step test for the assessment of patentability, namely:

- 1) *Properly construe the claim*
- 2) *Identify the actual (or alleged) contribution*
- 3) *Ask whether it falls solely within the excluded matter*
- 4) *Check whether the contribution is actually technical in nature.*

The operation of the test is explained at paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is the inventor has really added to human knowledge, and involves looking at substance, not form. Paragraph 47 adds that a contribution which consists solely of excluded matter will not count as a technical contribution.

Construe the claim

- 17 I do not consider there to be any issues with the construction of the claims. Claim 1 relates to a system for identifying lost/stolen animals which have been implanted with an identification tag/transponder. The system utilises a plurality of hand-held scanners, a local database in contact with at least one other database and comparison means to identify missing animals in order to reunite them with their owners. The scanners are provided with an anonymised list containing only a list of unique identification numbers relating to identification tags/transponders implanted in lost/stolen animals. There is also a means enabling the unique identification number to be linked to the owner, whose personal data is otherwise kept at a remote database.

Identify the actual contribution

- 18 Due to the presence of added matter in claim 1 I must be careful when identifying the actual contribution. During the hearing Mr Walker conceded that there was nothing

¹ Aerotel Ltd v Telco Holdings Ltd (and others) and Macrossan's Application [2006] EWCA Civ 1371

² Symbian Limited's Application [2008] EWCA Civ 1066

³ AT&T Knowledge Ventures LP and CVON Innovations Limited [2009] EWHC 343

new in the hardware and that the novel features of the invention lie in how the system manipulates data to allow the identification of lost/stolen animals while keeping owner data secure. I agree with this analysis.

- 19 At the hearing, after discussion with Mr Walker, it was agreed that the contribution is a system for identifying lost/stolen animals where data is pulled from one or more databases, the data being processed to include unique identity numbers and links back from the numbers to the database containing owner personal data, a list containing only the unique identification numbers is provided to hand-held scanners. In my view this is still an accurate assessment of the contribution when the added matter identified above is omitted.

Ask whether the contribution falls solely within excluded matter

- 20 The contribution identified above concerns, in essence, how data is distributed across a known arrangement of hardware. There is no doubt in my mind that this distribution is implemented by one or more computer programs. However, the mere fact that the invention is effected with software does not of course mean that it is automatically excluded as a program for a computer as such. What matters is whether or not the invention provides a non-excluded technical contribution.
- 21 At the hearing Mr Walker argued that the contribution was not excluded as it relates to providing a 'better' system for identifying lost/stolen animals. Specifically, it is 'better' as it only provides lists of identification numbers to hand-held scanners, leaving owner personal data on one or more remote databases. Mr Walker explained that this is a key feature of the system as it allows it to conform with the various requirements of data protection legislation in different countries. This is also explained in lines 22 to 25 of page 9 of the description.
- 22 Again I am happy to accept Mr Walker's argument and I agree that the contribution has an effect beyond just that of a programme running inside a computer. However, to my mind the key question is: does the contribution, specifically, the advantage identified above, amount to a relevant technical effect? As explained by Mr Walker, the way the data is distributed is performed primarily to conform with data protection legislation. Page 9 of the description adds the additional reason that an owner may simply wish to remain anonymous.
- 23 Neither of these reasons would appear to be technical in nature. Rather, they relate to what may be called the business method of operating the animal identification system. Obviously it is desirable to adhere to local laws and to be able to offer users anonymity if they desire it but these are business related decisions not technical problems leading to technical solutions. While the distribution of data in the system *may* result in it running faster, more efficiently, or more securely than prior art systems, these advantages, if they exist at all, are merely unintended side effects. I do not believe that they are enough to stretch the contribution beyond the excluded categories.
- 24 In my view the contribution identified above amounts to a specific distribution of data on known hardware, enacted by software to achieve a method of doing business –

i.e. to conform with data protection legislation. I thus conclude that it is excluded as some combination of a method of doing business and a programme for a computer as such.

Check whether the contribution is actually technical in nature

- 25 As reasoned above, the contribution does not have a relevant technical effect. The application thus fails the fourth Aerotel step.

Inventive step

The law and its interpretation

- 26 Section 1(1) of the Patents Act states that:

A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –

....

(b) it involves an inventive step;

....

(d) the grant of a patent for it is not excluded by subsections (2) and (3) or section 4A below;

...

- 27 Section 3 of the Act goes on to state that:

An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3) above).

- 28 Section 2(2) of the Act reads:

The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.

- 29 In addition to statute, the courts have long used the so called Windsurfing test to assess issues of inventive step. This test was reformulated by the Court of Appeal in Pozzoli⁴. Paragraph 23 of this decision lays out the test as:

(1) (a) Identify the notional "person skilled in the art"

(b) Identify the relevant common general knowledge of that person;

⁴ Pozzoli SPA v BDMO SA [2007] EWCA Civ 588

(2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;

(3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention.

30 I will now apply the Windsurfing/Pozzoli test as set out above.

The 'person skilled in the art' and their relevant common general knowledge

31 The examiner identified the person skilled in the art to be "a person having a background in animal care, possibly in the veterinary field or animal husbandry". I believe that this is a reasonable assessment and note that the applicants did not disagree or suggest any alternatives.

32 As for the common general knowledge of such a skilled person, I believe that they would be aware of various systems and apparatus used for animal identification, including those in the prior art documents raised in the examination reports. They would also have a standard working knowledge of commonplace IT equipment.

Identify the inventive concept of the claim

33 The inventive concept is not dissimilar to the contribution identified above when applying the Aerotel test. I believe that the inventive concept lies in anonymising the data containing a pet owners personal information to produce a list containing only numbers relating to identification tags/transponders in lost/stolen animals; providing only this list to a hand-held scanner and providing a link from the anonymised data back to the database containing the personal data to allow a lost/stolen animal to be re-united with its owner.

What differences exist between the state of the art and the inventive concept of the claim?

34 The prior art cited by the examiner discloses examples of various systems for identifying animals. US6684810 B2 discloses using RF tags/transponders implanted in animals to automatically identify them using data on a local memory or a central database. WO99/45761 A1 also discloses the use of RFID tags to identify animals in communication with a host computer. US2004/0230607 A1 details using a variety of different tags (but not explicitly RF tags) to identify pets using multiple databases and returning them to their owners. Finally, US2002/0116390 A1 discloses a system for the identification and retrieval of lost pets which includes multiple databases and uses nose prints to identify animals.

- 35 At the hearing Mr Walker argued that none of the prior art documents addressed the problem of maintaining the anonymity of a pet owner's personal data in order to comply with local data protection regulations and/or the owner's wishes. He further argued that none of the prior art therefore disclosed, or even implied, anonymising the data such that only a list of numbers relating to identification tags is provided to hand-held scanners whilst providing a link back from the numbers to the database containing the personal data.
- 36 I agree with Mr Walker that these are indeed the key differences between the state of the art and the inventive concept of the current application.

Do those differences constitute steps which would have been obvious to persons skilled in the art or do they require any degree of invention?

- 37 Upon reflection, I do not consider that the differences highlighted above would have been obvious to a person skilled in the art. The prior art documents cited by the examiner when taken individually, or in combination, do not teach encoding data so as to maintain the anonymity of a pet owner. Whilst anonymising data is well known as a general concept I do not consider it would be an obvious modification to any of the systems disclosed in the prior art documents.
- 38 Furthermore, the inventive concept includes the vital step of providing a link from the encoded data back to the database containing the personal data of the owner. Without this step it would not be possible to re-unite the owner with a lost animal. Again such a link is not disclosed in any of the prior art documents and would not be an obvious modification as none of them makes use of anonymised data.
- 39 Therefore I consider claim 1 to be inventive over the cited prior art. I further believe that this remains true even when the added matter identified above is omitted.

Decision

- 40 I have found that the inventive concept of claim 1 is not obvious under section 1(1)(b) of the Patents Act. However, I have found that amended claim 1 contains added matter contrary to section 76(2).
- 41 Most importantly though, I have found that the contribution made by the invention defined by claim 1 falls solely in subject matter excluded under section 1(2) as some combination of a method of doing business and a programme for a computer as such. 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).

Appeal

42 Any appeal must be lodged within 28 days

Stephen Brown

Deputy Director, acting for the Comptroller