



PATENTS ACT 1977

APPLICANT	Innoplexus AG
ISSUE	Whether GB1804895.9 complies with Section 1(2) of the Act.
HEARING OFFICER	Stephen Brown

DECISION

Introduction

- 1 This decision covers the application GB 1804895.9 which was filed on 27th March 2018 requesting a Combined Search and Examination.

Application Status

- 2 The Examiner declined to perform a search issuing a search report under Section 17(5)(b) and an Abbreviated Examination Report (AER) on 27th September 2018. The application was then subsequently published as GB 2572541A on 9th Oct 2019.
- 3 The attorney for the applicant filed new claims on 27th March 2020. The Examiner issued a further examination report on 28th May 2021. In that letter the Examiner offered the applicant a chance to be heard before a senior officer at the IPO.
- 4 The applicant accepted this offer on 21st July 2021 and requested that the matter be decided “upon the basis of supporting arguments advanced in the prosecution so far”. They provided no further argument or response to the Examiner’s last report

The Issue

- 5 The matter has therefore come before me to decide on whether the application meets the requirements of Section 1(2) of the Act.

The Law

- 6 The section of the Act concerning inventions excluded from patentability is Section 1(2), which reads:

“1(2) 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)...

(b)...

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

(d) ...

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.**”

- 7 In order to decide whether an invention relates to subject matter excluded by Section 1(2), the Court of Appeal has said that the issue must be decided by answering the question of whether the invention reveals a technical contribution to the state of the art. The Court of Appeal in *Aerotel/Macrossan*¹ set out the following four-step approach to help decide the issue:

1) Properly construe the claim;

2) Identify the actual (or alleged) contribution;

3) Ask whether it falls solely within the excluded subject matter;

4) Check whether the actual or alleged contribution is actually technical in nature.

- 8 The operation of the approach 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.

- 9 The case law on computer implemented inventions has been further elaborated in *AT&T/CVON*² which provided five helpful signposts to apply when considering whether a computer program makes a relevant technical contribution. In *HTC v*

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

² *AT&T Knowledge Ventures LP and CVON Innovations Limited v Comptroller General of Patents* [2009] EWHC 343

*Apple*³, Lewison LJ reconsidered the fourth of these signposts and felt that it had been expressed too restrictively. The signposts are:

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

The Application

- 10 I am basing this decision on the claims filed by the applicant on 27th March 2021. These comprise three independent claims, claim 1 to a system, claim 12 to a method and claim 22 akin to a program claim. These three claims are set out in Annex A. In lieu of any further argument, I am taking the applicant's response of the same date as the arguments against the Examiner's objection under Section 1(2)(c) of the Act.
- 11 It is helpful at this point to set out how I understand the application. Put simply, the system allows a user to provide some input to enable a web crawler to identify possible content. This content can then be filtered and scored, so as to produce matches that have a high probability that they are related to the input.

Analysis

- 12 In completing any assessment of potentially excluded matter, the appropriate test to follow is that set out in *Aerotel*¹. However, in this particular case, I do not think it is necessary to provide the usual step by step analysis. I say this on the basis that the application is clearly a method of obtaining data (the web crawler), filtering the data (the first noise) and identifying probable links to the original input (the ontology and second noise). It then scores each possible association and outputs the one with the highest score. That, in a nutshell is both my construction of the claims and identifying their contribution. Also, this method is clearly enacted by a computer program.

³ HTC v Apple [2013] EWCA Civ 451

- 13 The applicant in their one and only response has made several observations. Firstly, on construction they argue I should take account of the fact that data is held on external devices and that this will affect any such external device. I am afraid I disagree. Retrieving data from external systems is so well known that it cannot form part of the contribution. While external data is accessed, what the invention has added to human knowledge occurs entirely within a computer, namely the filtering and scoring of data.
- 14 Secondly, the applicants argue that I should consider that the system may mitigate the issue of retrieving irrelevant data from the sources. I can see no evidence as to how this may be achieved given that the web crawler visits the websites to acquire web content (the opening clause) before any filtering of the data occurs (clause a and b). Thus the system may still retrieve irrelevant data but it will hopefully filter it out once it is in the computer.
- 15 The applicant has further argued that it may “reduce the power consumption and wear and tear of external as well as internal hardware”. Again, I can see no evidence to support this argument given that there is no mention of “wear and tear” or “power consumption” in the specification.
- 16 Having already decided the application is for a computer program. I would normally consider the AT&T signposts³ in some detail. I see no need to do so with the current application but I will deal with those signposts raised by the applicant. Firstly, they argue that there is an external effect because the system retrieves data from external sources. As I have reasoned above, this is so well known that I cannot consider it part of the contribution.
- 17 They further argue that the program makes the computer a better computer. This is, they say, as a result of the database structure having a more relevant and indexed content. While I accept this might result in a ‘better’ database, that is not the same thing as the computer, itself, operating in new way or operating more efficiently. It is just a better database on an otherwise standard computer. I note that on page 11, lines 9 to 12, of the description, the applicant lists some industry standard databases. I thus conclude that the current system does not even result in a new database structure let alone a ‘better’ computer.
- 18 Their last point on the signposts is that the system solves the technical problem of repeatedly accessing a remote database because it uses filtering to reduce the amount of data resulting in a smaller database. I am not sure that this is what is happening, but in any case, as this application is purely about processing data it does not solve a technical problem outside that of organising data in a database.
- 19 Finally, the applicants argue that I should accept the view of the EPO in T 844/07 and follow that. Whilst the decisions of the EPO are persuasive, I am bound to follow UK legal precedent, and that is clearly telling me that this is no more than a programme for a computer, as such.

Conclusion

- 20 I have decided that the invention defined in the independent claims falls solely within matter excluded under Section 1(2) as a program for a computer as such. Having reviewed the application, I do not consider that any saving amendments are possible. I therefore refuse the application under section 18(3).

Appeal

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

Stephen Brown
Deputy Director acting for the Comptroller

Annex A

Claim 1

A system for acquiring web content related to a received input from a plurality of data sources, that identifies at least one association of an entity for retrieval of contextually relevant associations of the entity, wherein the system comprises:

At least one crawler operable to crawl the plurality of a data sources for acquiring the web content, wherein the at least one crawler is operable to systematically visit publicly available internet sources and extract web content;

A Processing module operable to:

- a) Filter the acquired web content to obtain information relating to the entity by removing a first type of noise from the acquired web content;
- b) Identify probable associations of the entity from the information relating to the entity using an ontology and removing a second type of noise;
- c) Determine for each of the probable associations, at least one of: a recency attribute a frequency attribute, a proximity attribute, a semantics attribute
- d) Determine a probability score for each of the probable associations of the entity, based on at least one for each of the probable associations of the entity based on at least one of the frequency attribute, the proximity attribute, the semantics attribute; and
- e) Identify the at least one association of the entity from the probable associations, wherein the at least one association corresponds to a highest probability score; and

A database arrangement communicably coupled to the at least one crawler and the processing module, wherein the database arrangement is operable to store the data related to the entity, the probability score of each of the probable associations of the entity and the at least one association of the entity,

Claim 12

A method of acquiring web content related to a received input from a plurality of data sources, that identifies at least one association of an entity for retrieval of contextually relevant associations of the entity, wherein the method comprises:

- a) crawling the plurality of a data sources for acquiring the web content, wherein the at least one crawler is done by systematically visiting publicly available internet sources and extract web content;
- b) filtering the acquired web content to obtain information relating to the entity by removing a first type of noise from the acquired web content;
- c) identifying probable associations of the entity from the information relating to the entity using an ontology and removing a second type of noise;
- d) determining for each of the probable associations, at least one of: a recency attribute a frequency attribute, a proximity attribute, a semantics attribute
- e) determining a probability score for each of the probable associations of the entity, based on at least one for each of the probable associations of the entity based on at least one of the frequency attribute, the proximity attribute, the semantics attribute; and

- f) Identifying the at least one association of the entity from the probable associations, wherein the at least one association corresponds to a highest probability score; and

Claim 22

A computer readable medium containing program instructions for execution on a computer system, which when executed by a computer, cause the computer to perform [a] method of acquiring web content related to a received input from a plurality of data sources, that identifies at least one association of an entity for retrieval of contextually relevant associations of the entity, wherein the method comprises:

- a) crawling the plurality of a data sources for acquiring the web content, wherein the at least one crawler is done by systematically visiting publicly available internet sources and extract web content;
- b) filtering the acquired web content to obtain information relating to the entity by removing a first type of noise from the acquired web content;
- c) identifying probable associations of the entity from the information relating to the entity using an ontology and removing a second type of noise;
- d) determining for each of the probable associations, at least one of: a recency attribute a frequency attribute, a proximity attribute, a semantics attribute
- e) determining a probability score for each of the probable associations of the entity, based on at least one for each of the probable associations o the entity based on at least one of the frequency attribute, the proximity attribute, the semantics attribute; and
- f) Identifying the at least one association of the entity from the probable associations, wherein the at least one association corresponds to a highest probability score;