



## PATENTS ACT 1977

APPLICANT	Sien Chen
ISSUE	Whether patent application GB1815344.5 complies with section 1(2)(c)
HEARING OFFICER	Dr L Cullen

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### DECISION

- 1 This decision relates to the issue of whether the application GB1815344.5, published as GB2573351, meets the requirements of section 1(2)(c) of the Patents Act 1977 (“the Act”).

#### Background

- 2 Throughout the examination process, the Examiner has maintained that both the claimed invention and the entire content of the application are excluded from patentability under section 1(2)(c) of the Act. No search for the invention has been performed, on the basis that it would serve no useful purpose in advancing the application under section 17(5)(b) of the Act. The Applicant has contested the finding of excluded matter in two rounds of correspondence, leading to a request for a hearing in their agent’s letter of 22 September 2020. However, in an email of 19 January 2021 their agent requested instead that a Decision be issued on this application based on the papers on file.
- 3 My analysis herein is therefore based upon the amended claims filed with the agent’s letter of 22 September 2020 and the corresponding specification.
- 4 The Examiner’s objections are set out in the official report dated 16 October 2020. This report, the pre-hearing report, set out the matters to be decided at the requested hearing, and is now to be dealt with in the present decision based on the papers on file.
- 5 The Applicant’s arguments and observations are set out in the letters dated 4 May 2020 and 22 September 2020.
- 6 For the avoidance of doubt, no further arguments, amendments or auxiliary requests have been filed since the pre-hearing report dated 16 October 2020 was issued by the examiner.

- 7 The dossier for the application, including the current claims, the Applicant's letters, and the report from the Examiner setting out the matters to be decided at the hearing, can be viewed on IPSUM, the IPO's online patent information and document inspection service:

<https://www.ipo.gov.uk/p-ipsu.htm>

### **Subject Matter**

- 8 The invention provides a computer-implemented method of analysing data relating to the passengers of a transport business such as an airline.
- 9 Multidimensional information related to the passengers of the transport business is collected, and passenger value scores are generated in a machine learning mode. The information collected relates to a customer's travels, bookings, bad experiences, social influence, social age, interests, and/or membership level. A known algorithm is used to generate a reference model, which is validated with the test set to generate a passenger value assessment model and this model provides more accurate passenger value score data to inform marketing decisions and cost decisions of the airline. The method of the invention is claimed to more accurately quantify the value of individual passengers to the business, such that the resulting information can better inform marketing and cost decisions.
- 10 The applicant argued that this approach enables passenger data to be processed in an improved and more efficient manner.
- 11 The invention is claimed as a method and as a machine-learning system.

### **The Law**

- 12 The relevant law is defined in section 1(2) of the Act and can be viewed online at the IPO's website. For the text of the Act, see<sup>1</sup>:

[The Patents Act 1977 - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

for the text of the Patent Rules 2007, as amended, see<sup>2</sup>:

[The Patent Rules 2007 and \(Fees\) 2007 \(as amended\)  
\(publishing.service.gov.uk\)](http://publishing.service.gov.uk)

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<sup>1</sup> See <https://www.gov.uk/government/publications/the-patents-act-1977>

<sup>2</sup> See [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/949850/consolidated-patents-rules-and-fees-rules-2007.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/949850/consolidated-patents-rules-and-fees-rules-2007.pdf)

- 13 The Manual of Patent Practice explains the IPO's practice under the Act and the Rules and makes helpful references to relevant case law. The Manual can be viewed online at the IPO's website:

<https://www.gov.uk/guidance/manual-of-patent-practice-mopp>

- 14 Paragraphs 1.33–1.39.3 of the Manual, which relate to business methods and computer programs, are relevant to the present case.
- 15 There is no dispute concerning the relevant law and its application to the facts of this case.

### **Argument and Analysis**

- 16 I have carefully considered both the Examiner's objections and the Applicant's arguments set out in the correspondence on file, and the relevant law and practice highlighted above. Taking all of this into consideration, I agree with the assessment and analysis of the issues as set out in the pre-hearing report dated 16 October 2020 prepared by the examiner. As a consequence, I find that the application fails to meet the requirements of section 1(2)(c) of the Act.
- 17 I have read the application in full and I agree with the examiner that the entirety of its content concerns a method for doing business and a program for a computer, without making any contribution of a technical nature. I therefore find that there is no scope for a saving amendment.

### **Conclusion**

- 18 Patent application GB1815344.5 fails to meet the requirements of section 1(2)(c) of the Act. It is refused under section 18(3) of the Act.

### **Appeal**

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

**Dr L CULLEN**

Deputy Director, acting for the Comptroller