

The application

- 4 The application relates to an educational puzzle that aims to improve familiarity with the five vowels in the English language. Mr Anderson described it as a “scrambled letter puzzle” of which anagrams are the most familiar form. For brevity I will refer to anagrams throughout my decision.
- 5 In essence an incomplete anagram is presented to the user as a set of scrambled letters which requires an additional vowel to be added before the anagram can be solved. To ensure that the correct additional vowel is selected by the user, a short story is presented accompanying the incomplete anagram, which story contains a word that contains all the letters of the complete anagram. Thus by reading the story, the user can check that they have selected the correct vowel to complete the anagram. The user can then go on to solve the anagram puzzle itself. In the main embodiment described the puzzle is presented in a booklet using temporarily attachable vowels to complete the anagram, where the answer to the anagram is recorded on a width-shortened page that is perforated or glued along one side to allow for removal. These features provide reusability of the puzzle.
- 6 The application as last amended on 14 November 2016 comprises one independent claim and nine further dependent claims. Claim 1 reads:

An educational apparatus to facilitate the placement of the English vowels "A - E - I - O - U " by forming specific vowel generated anagram / anagrams, Fig 1: fig 5: crucially this apparatus has a control system / mechanism that controls which single vowel is to form the anagram,(the inserted vowel forms the anagram) without some sort of control system / mechanism it would not be possible to allocate the English vowels so that a specific vowel generated anagram would be produced, this point can be illustrated from an earlier patent that was granted GB2349344 where a plurality of different anagrams could be formed from an incomplete anagram awaiting a single vowel to complete it, each different anagram being formed by the inclusion of a different single vowel: this current educational apparatus has incorporated a control mechanism into it that is designed to eliminate an incorrect anagram being formed, this control has been achieved by incorporating a purposely written short story to accompany the incomplete anagram that is awaiting a single vowel to complete it fig 1: the short story has a word weaved into it that has been made from the pre-designated anagram that is to be formed by the inclusion of the correct vowel being placed with the incomplete anagram, this word weaved into the story acts as a control word, it is there as a vowel verification system, to verify / confirm, the correct vowel was selected to form the pre-designated anagram that had been assigned, this is important as many incomplete anagrams awaiting a single vowel to complete them could accept and form anagrams with a plurality of single vowels fig 1: (also look at earlier Patent GB2349344) the word weaved into the purposely written accompanying short story is to be used as a vowel verification mechanism / system, it is not there to direct which word is to be formed, (and later recorded, from the formed pre-designated anagram;) - additionally, on occasions, a plurality of words could be made from the same anagram, -- (fig 1: Steam - Meats - Mates - Teams - are different words made from the same anagram that was formed by the insertion of the vowel "E" any of these words could be selected and recorded because as stated the word weaved into the short story is there for the purpose of verifying that the correct vowel was selected to form the correct anagram not the correct word - the word weaved into the short story is therefore a vowel verification system / mechanism - an Anagram control system /

mechanism, it is not a word control system / mechanism.) - after an anagram has been formed a person is required to read the short story so as to verify / confirm that the correct vowel was allocated and formed the pre-designated anagram, once a vowel has been identified as forming the pre-designated anagram that vowel is then required to be attached temporarily to the educational apparatus at the designated location, fig 1, fig 5, the five English vowels – A-E-I-O-U- are supplied for this purpose, a word that can be formed from this anagram, is then to be recorded, the word is recorded on a width shortened page that is opposite and adjacent the page requesting the vowel, fig 3, these width shortened pages are perforated along one side and or glued along one side to allow for removal, the supplied temporarily attachable vowels, and the removable width shortened pages, allow for repeat usage of material, all the above is repeated according to the number of anagrams that are to be formed.

- 7 Claim 6 purports to be dependent upon claim 1, but relates to a computer implemented embodiment of the invention that lacks the constructional features of claim 1. It reads:

Claim6 : As claim 1: Where this educational apparatus could be presented as an app for use with phones: tablets: etc, or it could be used with a computer

The Law

- 8 Section 1(2) of the Patents Act 1977 sets out various things that are not considered to inventions for the purposes of the Act. It reads (my emphasis):

"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 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 Patent Office Boards of Appeal that have been issued under this Article in deciding whether the present invention is patentable although I am not bound to follow them.

- 10 These provisions have been the subject of regular consideration by the UK courts. The assessment of patentability under section 1(2) is governed by the judgment of the Court of Appeal in *Aerotel*¹, as further interpreted by its judgment in *Symbian*². In *Aerotel*, 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”. Those steps are:
- i. properly construe the claim;
 - ii. identify the actual contribution;
 - iii. ask whether the identified contribution falls solely within the excluded subject matter;
 - iv. 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* 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 (though it does not matter whether I do that at step 3 or step 4).

Applying the *Aerotel* test

- 12 At the hearing, most attention was focussed on claim 1 and that is where I will begin before moving onto claim 6. There was no suggestion from Mr Anderson that anything in any of claims 2-5 or 7-10 would render them patentable should I find claim 1 to be unpatentable and in my opinion, as regards excluded matter, those other claims stand or fall with claim 1.

(i) Properly construe the claim

- 13 Step (i) of the *Aerotel* test requires me to properly construe claim 1. That is not straight forward in this instance because the claim is very inconcisely drafted. To facilitate this process I have distilled the wording of the claimed invention down such that I consider it to define apparatus whereby:

an incomplete anagram is presented to the user as a set of scrambled letters which requires an additional vowel to be added before the anagram can be solved and wherein;

a short story is presented accompanying the incomplete anagram, which story contains a word that contains all the letters of the complete anagram and

¹ *Aerotel Ltd v Telco Holdings Ltd and Macrossan's Application* [2006] EWCA Civ 1371, [2007] RPC 7

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

whereby by reading the story, the user can check that they have selected the correct vowel to complete the anagram and

the puzzle is presented in a booklet using temporarily attachable vowels to complete the anagram and where the answer to the anagram is recorded on a width-shortened page that is perforated or glued along one side to allow for removal.

(ii) Identify the actual contribution

- 14 Having construed the claim, I now need to identify the contribution provided by the invention. Guidance on how to identify the contribution is given in paragraph 43 of the *Aerotel* judgement where the court accepted the proposition that identifying the contribution is “*an exercise in judgement 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*”.
- 15 Mr Anderson helpfully brought with him a prototype to demonstrate the physical features of his apparatus and proposed that these physical features, in particular those associated with the apparatus’ reusability, result in the invention being more than an excluded invention defined in one of the excluded categories as such.
- 16 The difficulty I have with this is that the features of the physical apparatus defined in claim 1 are conventional as shown in the prior art documents cited by the examiner; the use of detachable sticky letters in educational aids is known as is the provision of features like perforations to facilitate the removal of pages in educational books. So what is it that the inventor has really added to human knowledge? Notwithstanding the fact that the claim is drafted at least partly in terms of the physical means through which the invention is presented, in my opinion the contribution made by the invention resides in the vowel verification aspect of the invention – the way that the user can check that the correct vowel has been selected to complete the anagram by including the completed anagram in a passage of accompanying text. Indeed Mr Anderson acknowledged that this was indeed where the contribution resides.
- 17 I therefore consider the contribution of the invention to be a teaching aid used to improve familiarity with vowels, where as a precursor to solving anagrams, the user is required to select a vowel to be combined with an existing set of letters to form a complete anagram, the user being able to verify that they have selected the correct vowel by checking that the complete anagram appears as a word in an accompanying text.
- 18 This definition of the contribution is consistent with the fact that claim 6 relates to a computerised implementation of the invention which will clearly lack the constructional (reusable) elements specified in claim 1.

(iii) Does the contribution fall solely within the excluded matter and (iv) is the contribution actually technical in nature?

- 19 The examiner has reported that the invention of claim 1 is excluded under a number of the categories listed in section 1(2). It is clear to me that in substance the contribution made by the invention as identified above constitutes the rules for playing a game as such and falls solely within excluded matter. That the game is an educational one is of no consequence.
- 20 Moreover the contribution made by the invention in claim 1 is clearly not technical in nature however clever or ingenious that game may be.
- 21 Having reached that conclusion I do not need to consider whether the contribution made by claim 1 falls into any of the other categories (or a combination thereof³),

Claim 6

- 22 As mentioned above claim 6 defines a computer implemented embodiment of the invention. This makes the same contribution as the invention defined in claim 1 and is likewise excluded as relating to the rules for playing a game as such. Additionally I consider it is also excluded as a program for a computer as such in that it is a program that makes no technical contribution.

Other matters

- 23 In his skeleton argument, Mr Anderson referred me to a Department of Trade and Industry publication dating from 1995 that reads, *"[An invention] is not patentable if it is merely a scheme or method forplaying a game.... Of course, if it necessarily involves more than these abstract aspects so that it has physical features, for example special apparatus to play a new game, then it may be patentable"*.
- 24 This DTI publication does appear to be based on section 1(2) of the Patents Act 1977, but differs in the exact wording used, possibly in an attempt to make it more accessible to the lay reader. However, I am bound to follow the precise wording of Patents Act 1977, as interpreted by precedent case law, in reaching my decision. Therefore, this DTI publication has no bearing. It is also noted that the DTI publication pre-dates the *Shopalotto*⁴ Patents Court decision of 2005 after which the Office changed its practice regarding the patentability of games, laying down that the patentability of games should be assessed in the same way as other categories of excluded invention, i.e. by determining whether the invention makes a technical contribution as I have done.
- 25 Mr Anderson also queried why he had been granted a patent in the past for a similar anagram word game but was having difficulty getting his current application granted. I explained that GB 2349344 was granted in 2003, pre-dating the *Shopalotto* court

³ (Raytheon Company v Comptroller General of Patents, Designs and Trade Marks [2007] EWHC 1230 (Pat))

⁴ (Shopalotto.com Ltd's Application [2006] RPC 7)

decision and the change in Office practice. Furthermore each individual patent application is assessed on its own merits in light of the most recent case law, so the previously granted patent has no influence on my decision for this application.

Conclusion

- 26 I have found that the invention defined in claim 1 is excluded since it relates to a rule for playing a game as such. Furthermore there is nothing in any of the remaining claims that enables them to avoid that exclusion with the invention defined in claim 6 also being excluded as a program for a computer as such. I cannot envisage any possible amendment that could form the basis of a valid claim and I therefore refuse the application under section 18(3) for failing to comply with section 1(2)(c).

Appeal

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

A BARTLETT

Divisional Director, acting for the Comptroller