



## PATENTS ACT 1977

APPLICANT      Martin Alexander Hay & Frances Geralyn Boul Hay

ISSUE            Whether patent application number  
                     GB1407018.9 complies with Section 1(2)(c)

HEARING OFFICER                                  Andy Bartlett

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### DECISION

#### Introduction

- 1      This decision addresses the issue of whether the invention defined in GB1407018.9 relates to subject matter that is excluded under section 1(2).
- 2      The application is entitled 'Technology Alternative to Money for Enabling Equitable Trade' and derives from PCT application PCT/US2012/060514 filed in the name of Martin Alexander Hay & Frances Geralyn Boul Hay on 17 October 2012 claiming a priority date of 18 October 2011. The international application was published as WO2012/174576 on 20 December 2012. After entering the national phase in the UK it was reprinted as GB2509459.
- 3      Throughout the examination process the examiner has reported that she considers the invention to be excluded as a method of doing business and a program for a computer as such. The Applicants do not agree but have not been able to persuade the examiner that the application complies with Section 1(2) of the Patents Act 1977 (the Act). Consequently the matter came before me at a hearing on 17 August 2015 which was attended by the applicants, Martin Alexander Hay & Frances Geralyn Boul Hay. Also in attendance were the examiner, Sally Vinall, and my assistant, Kalim Yasseen.
- 4      I am extremely grateful to Mr Hay for all the submissions he has made in relation to this application including the skeleton argument he submitted on 22 July 2015, at the hearing itself (including a demonstration of the invention) and subsequent to it. I confirm that I have taken all those submissions and all the other correspondence on file into account in reaching my decision.

#### The application

- 5      The application states that the invention relates to "technology, alternative to money, for enabling users to engage in equitable trade. The technology embodies chiralkine money and chiralkine property rights created as vectors through chiralkine contracts

made by users in a trading pair and a recorder that maintains an open register". It is I feel best explained by contrasting it with a conventional trading system employing "fiat" money.

- 6 As explained in the specification, in such a conventional monetary system, a bank creates money which it lends to the buyer of a trading pair. The buyer then exchanges the money they have borrowed for the item they want to buy from the seller. In exchange they receive the rights to the property from the seller.
- 7 By way of contrast, in the chiralkine system according to the invention, it is the trading partners (not the bank) that create the money when traders enter into a chiralkine contract. Two distinct forms of money are created in equal amounts which are described as "left-handed" and "right-handed" consistent with the terminology commonly employed when "chiral" concepts are considered in other fields. The buyer initially receives one of these ("right handed") and the seller the other ("left handed"). Likewise, the property rights in the goods being traded are also ascribed using the same chiral concepts with the seller initially having the "right handed property right" and the buyer the "left handed property right". The right and left handed money and the right and left handed property rights are exchanged during the trade. The contract entered into has two parts, one part between the individual trading partners and the other part between the trading partners as a pair and the bartering organisation. The contract is only completed once both traders are able to redeem the chiral money they initially received (for example using right and left handed money received from taking part in other trades with other partners). At that point the right and left handed property rights collapse into a monopole property right (akin to conventional ownership of the property right). Importantly the role of the bank (or bartering organisation) in the chiralkine system is reduced to that of a register of transactions, rather than as the provider of finance.
- 8 The claims I have been asked to consider were filed on 7 May 2014. There are 11 claims in total of which claims 1, 5 and 9 are independent. The independent claims read as follows:

*Claim 1*

*A chiralkine system for enabling equitable trade between users, which comprises an information transmission network having a register maintained by a recorder, said register being open to inspection by said users and containing records of chiralkine money and chiralkine property rights created under chiralkine contracts.*

*Claim 5*

*A web-based system for a bartering organisation and users thereof, which comprises:*

- (a) means for creating user agreements between said bartering organisation and said users; and*
- (b) means for implementing user agreements between said bartering organisation and said users, comprising:*
  - (i) means for representing chiralkine money;*
  - (ii) means for representing and operating user accounts in chiralkine*

money;  
 (iii) means for representing monopole property rights;  
 (iv) means for representing chiralkine property rights;  
 (v) a web-based bartering market for creating barter transaction agreements between users for monopole property rights or chiralkine property rights in chiralkine money;  
 (vi) means for creating credit agreements between said bartering organisation and users subject to a barter transaction agreement, for creating chiralkine money and chiralkine property rights;  
 (vii) means for implementing said barter transaction agreements; and  
 (viii) means for implementing said credit agreements, including means for creating chiralkine money, means for creating chiralkine property rights when said chiralkine money is created; means for destroying chiralkine money, and means for collapsing chiralkine property rights into monopole property rights when said chiralkine money is destroyed.

### Claim 9

*An apparatus adapted for use with left and right handed money, selected from:*

*a bank card, comprising a machine readable identification code, said card being adapted to handle transactions in left- and right-handed money;*  
*a cash machine adapted to dispense left- and right-handed money;*  
*a cash register adapted to handle and record transactions in left- and right-handed money;*  
*a vending machine adapted to receive money in one of right- and left-handed forms and dispense it in the other; and*  
*an apparatus for use by a bank, comprising left- and right handed money and a computer programmed to maintain records of transactions in left and right-handed money.*

### The Law

- 9 Section 1(2) of the Patents Act 1977 sets out various things are not considered to be inventions for the purposes of the Act. It 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 –*

- 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.”*

- 10 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.

- 11 These provisions have been the subject of regular consideration by the UK courts. The approach I am required to follow in applying them is that set out by the Court of Appeal in *Aerotel/Macrossan*<sup>1</sup>. In its judgment in *Aerotel* 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. 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.
- 12 The Court of Appeal viewed this test as entirely consistent with the approach it had previously adopted in *Merrill Lynch*<sup>2</sup> where it had found that novel or inventive purely excluded matter does not count as a “technical contribution”.
- 13 The operation of the test is explained at paragraphs 40-48 of the *Aerotel* 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.
- 14 I will now apply the four step *Aerotel* approach.

## **Analysis**

### **First step: Properly construe the claims**

- 15 Throughout the correspondence, attention has focussed on independent claims 1, 5 and 9. I too will focus on those claims before addressing the other claims should I need to.
- 16 Claim 1 does not present any particular problems as regards construction. It defines a system comprising an information transmission network including a register, which can be inspected by users, of records of money and property rights created according to the chiralkine model. In short it defines (at a very high level) the system through which the chiralkine monetary system can be implemented.
- 17 In similar vein, independent claim 5 defines a web-based system through which the chiralkine monetary system is implemented. It defines the invention in terms of a series of “means” each performing one aspect of the chiralkine model such as means for creating and implementing user agreements, means for representing chiralkine money and means for creating and implementing credit agreements. I note

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

<sup>2</sup> *Merrill Lynch's Application* [1989] RPC 561

that the means are defined entirely in terms of what they do rather than how they do it.

- 18 Claim 9 is rather more problematic. It is directed to “an apparatus *adapted* for use with left and right handed money” and then goes on to list various alternative embodiments of the apparatus including a bank card, cash machine, cash register, vending machine and the combination of the left and right handed money and computer system to allow a bank to administer the chiralkine monetary system. The examiner has reported that the claim is unclear because it contains alternatives. Whilst I agree with her on that, I do not feel it has any bearing on my decision as to whether the claim relates to excluded subject matter. More significantly and as also reported by the examiner, the claim includes no detail as to how any of the various pieces of apparatus listed in the claim is adapted for use with left and right handed money. The description provides no assistance in this regard either – it is silent as to how any of the apparatus recited in claim 9 is adapted for use with chiralkine money. I will come back to this point when considering the contribution made by this claim but as regards construction, claim 9 seeks protection for apparatus adapted to implement or interact with the chiralkine monetary system.

### **Identify the actual contribution**

- 19 The second step of the *Aerotel* test requires me to identify the actual contribution made by the claimed invention. At paragraph 43 of its judgment in *Aerotel*, the Court of Appeal endorsed the suggestion from Comptroller’s Counsel that this 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”.

- 20 In this regard, Mr Hay invested a good deal of effort in emphasising that the claims are directed to the hardware through which the chiralkine monetary system is implemented rather than to the monetary system itself. In his view the contribution was the hardware rather than the chiralkine monetary system itself. In support of that submission he drew my attention to a number of granted UK patents<sup>3</sup> for equipment such as vending machines or computer networks performing functions in the financial sector suggesting that if they were not excluded then neither was his invention.

- 21 As I explained at the hearing (and as most recently emphasised in the judgment of Birss J in *Lantana*<sup>4</sup>) the value of such an exercise is limited since each case has to be decided on its own facts. But in the present case I think the key question is to determine what the inventor has added to the stock of human knowledge. As I have indicated above, whilst drafted in terms of hardware, the present claims contain no detail as to how the hardware works or how it is adapted to implement the chiralkine monetary system. Furthermore there is no disclosure of this anywhere in the

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<sup>3</sup> GB2507498B, GB2461053B, GB2515288A, GB2492614B, GB2182716B, GB2487102B, GB2507596B, GB2180380A

<sup>4</sup> *Lantana Limited v The Comptroller General of Patents, Designs and Trade Marks* [2013] EWHC 2673 (Pat)

specification either. The hardware is characterised solely by the monetary system it is used to implement.

- 22 When I questioned him on this at the hearing, Mr Hay said he felt that his invention provided such a seismic shift in thinking from traditional monetary systems that he was entitled to claim the apparatus used to put it into effect at this level of generality. He said that the person skilled in the art of making say bank cards or vending machines would have no difficulty in putting the invention into practice once they were presented with the concept of the chiralkine monetary system.
- 23 In my opinion, the complete lack of any information anywhere in the specification as to how the invention is implemented clearly points away from the contribution residing in the hardware. If it is left entirely to the skilled person to decide how it would be implemented then I fail to see how it can be said that what the inventors have added to the stock of knowledge resides in the hardware through which the system is implemented. To decide differently would be to exalt form over substance.
- 24 Mr Hay also advanced the proposition that the contribution made by the invention could be viewed as the “elimination of an imaginary store of value” which I take to mean it does away with the need for banks and financial institutions to issue currency in its present form (and reducing the role of the bank to one of a register of transactions). I struggle to see how the contribution can be characterised in this way when the present invention still requires there to be currency (albeit a different one) in circulation either in virtual or hard currency form.
- 25 Ultimately, I think it highly informative to look at the problem that the invention is said to solve. It is very clear to me from the specification that the invention seeks to create a fairer, more equitable alternative to the current monetary system. The contribution is that alternative monetary system, irrespective of how it is claimed.

#### **Ask whether the contribution falls solely within excluded matter**

- 26 At the hearing most attention focussed on whether the invention was excluded as a method of doing business. In considering that I first need to address a submission made by Mr Hay as to the scope of the business method exclusion intended by Parliament. Mr Hay put it to me that the business method exclusion was intended to apply only to ‘asymmetric’ business methods by which he meant methods that would operate to the benefit of one of the partners to the detriment of others. He said that operation of the exclusion was intended to prevent exclusive rights being given to these type of business practices because they would create unfair advantage.
- 27 By way of contrast he put it to me that ‘symmetric’ business methods such as the chiralkine model should be allowable since they provide a level playing field for all businesses in the market place.
- 28 However, Mr Hay was unable to provide any support for this assertion and I am not aware of any suggestion that Parliament intended that patent protection should be available for some business methods and not for others. Indeed Mr Hay’s view is completely at odds with the judgment of the Court of Appeal in *Merrill Lynch* which stated:

*“Now let it be supposed that claim 1 can be regarded as producing a new result in the form of a technical contribution to the prior art. That result, whatever the technical advance may be, is simply the production of a trading system. It is a data-processing system for doing a specific business, that is to say, making a trading market in securities. The end result, therefore, is simply "a method .... of doing business", and is excluded by section 1(2)(c). The fact that the method of doing business may be an improvement on previous methods of doing business does not seem to me to be material. The prohibition in section 1(2)(c) is generic; qualitative considerations do not enter into the matter. The section draws no distinction between the method by which the mode of doing business is achieved. If what is produced in the end is itself an item excluded from patentability by section 1(2), the matter can go no further. Claim 1, after all, is directed to "a data processing system for making a trading market". That is simply a method of doing business. A data processing system operating to produce a novel technical result would normally be patentable. But it cannot, it seems to me, be patentable if the result itself is a prohibited item under section 1(2).”*

- 29 I am firmly of the view that the actual contribution- a novel monetary system- is precisely the sort of thing that parliament sought to exclude via the business method exclusion. Whilst the invention might provide a better, fairer monetary scheme it is clear from *Merrill Lynch* that that does not matter. The business method exclusion is generic and qualitative considerations do not come into it.
- 30 *Merrill Lynch* also reinforces the finding I have made above that defining the invention in terms of the unspecific hardware through which it is implemented does not make any difference. Indeed, the court’s finding that a data processing system for setting up a trading market in securities was a method of doing business clearly supports my finding that the alternative monetary system of the present invention is one too.
- 31 In his skeleton argument Mr Hay referred to the House of Lords judgment in *Generics (UK) Limited v H Lundbeck*<sup>5</sup> as supporting the patentability of the present invention. I fail to see how this judgment has any relevance to deciding whether the present invention is patentable beyond the fact that both concern “chiral” concepts. In *Generics*, the invention concerned different chiral forms of a pharmaceutical compound that have different clinical effects. The present invention provides an alternative monetary system. I have found that to be a method of doing business which the Act excludes from patent protection. There is no exclusion for pharmaceutical compounds in the Act.
- 32 In his written arguments, Mr Hay also sought to rely on the Court of Appeal judgment in *Aerotel Ltd. v Telco Holdings Ltd* to support his view that the present invention is not excluded on the facts. Mr Hay submitted that in that case the court found the invention to be patentable because it provided a “special exchange” that constituted a new arrangement of hardware (for storing prepayment & related customer information within a telephone system). This he said creates a new kind of relationship. He said this was on all fours with the present invention where the left and right handed money constitutes a special exchange, provides new hardware and creates a new type of relationship. I do not agree. The proposition that the *Aerotel*

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<sup>5</sup> *Generics (UK) Limited others v H Lundbeck* [2009] UKHL 12 [2009]

system provided a new arrangement of hardware was later found to be incorrect when the same patent was considered by the courts in *Aerotel v Wavecrest*<sup>6</sup>. In that case, when presented with additional prior art, the court concluded that the contribution did not reside in the hardware but in the function it was programmed to provide. That additional function – enabling prepaid telephone calls to be handled by the exchange as well as post paid calls – was found to be excluded as a method of doing business.

- 33 I have found above that the contribution made by the present invention is a new monetary system, not new hardware. The consideration of the Aerotel patent by the courts in these various proceedings does not assist Mr Hay.

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

- 34 The contribution made by the invention is an alternative monetary system. That is clearly not technical in nature.

**Other matters**

- 35 The examiner has also reported that the invention is excluded as a program for a computer as such. This exclusion was not the subject of much discussion at the hearing and having found the contribution to reside in excluded matter (as a method for doing business) I do not consider it necessary to decide if it is also excluded as a program for a computer (although I consider that highly likely in so far as all the claims encompass implementation of the invention using suitably programmed computer systems or apparatus).

**Decision**

- 36 I have found that the contribution made by the invention defined in the independent claims falls solely in subject matter excluded under section 1(2) as a method of doing business as such. I have read the specification carefully but can identify no amendment that could reasonably be expected to form the basis of a valid claim. I therefore refuse this application under section 18(3).

**Appeal**

- 37 Any appeal must be lodged within 28 days.

**A BARTLETT**  
**Deputy Director acting for the Comptroller**

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<sup>6</sup> *Aerotel Ltd v Wavecrest Group Enterprises Ltd & Others* [2008] EWHC 1180