



19 August 2014.

PATENTS ACT 1977

APPLICANT Sustainable Energy and Heating Systems Ltd

ISSUE Whether patent application GB 1201052.6 complies
with section 1(2)

HEARING OFFICER J Pullen

DECISION

Introduction

- 1 Patent application GB 1201052.6 entitled 'The "Renewable Energy Sharecropping Meter Switching Circuit" (Utilising chip and pin authentication)' was filed on 23 January 2012 in the name of Sustainable Energy and Heating Systems Ltd. It was published on 22 May 2013 as GB 2496698 A.
- 2 The examiner argues that the invention as claimed relates to a method of doing business and/or a computer program and as such it is excluded from patentability under section 1(2) of the Patents Act¹ ('the Act'). Despite amendment of the claims, the applicant has not been able to persuade the examiner that the invention is patentable.
- 3 Further examination was deferred until this issue is resolved and the applicant was made aware of this in the examination reports dated 6 August 2013 and 3 December 2013.
- 4 The offer of a hearing was accepted by the inventor, Mr Simon Hamblett, and the hearing was held, via Skype, on 29 May 2014. I was assisted by Mrs Kathryn Orme.
- 5 Mr Hamblett submitted a summary of his arguments prior to the hearing. In addition, I allowed further submissions to be filed following the hearing to give Mr Hamblett additional time to reconsider the patent documents forming the state of the art. I can confirm that both of these submissions have been taken into consideration in reaching this decision.

¹ <http://www.ipso.gov.uk/patentsact1977.pdf>

The application

- 6 The application relates to a metering system to measure usage of renewable energy produced by a privately owned micro-generating unit. The micro-generating unit is part of a larger commercial installation which operates on the basis of 'sharecropping', where private users are allocated amounts of renewable energy based upon their investment into the scheme.
- 7 The amount of renewable energy allocated to a user and other contractual terms and conditions are stored in a remote database which is accessed by a meter when appropriate security authorisation, i.e. chip-and-pin, is used.
- 8 The meter of the invention is able to identify the amount of renewable energy allocated to the user and interrupt the metering of energy supplied from a standard network supplier until the allocation of renewable energy is used up. The functionality of the meter also includes the ability to account for surpluses being fed back into an energy network and also measurement of any energy use which is over and above that produced by the micro-generating unit.
- 9 The claims were amended significantly on 19 November 2013 to direct the scope of the invention towards the metering device. These claims were further clarified on 3 February 2014, such that there are now only three claims in total which read as follows:
 - 1) A dual source electrical metering device which interfaces with an account management system of a "Non-Profit" co-operative renewable electricity plant in addition to a secondary electricity supplier in order to facilitate the distribution of renewable electricity direct to its members over the same transmission medium (the national grid) as an individual's secondary electricity supplier.
 - 2) A metering device as defined in claim 1 which can subtract units of renewable energy used within a residential home from a remote database account containing renewable electrical unit balances whilst at the same time interrupting the counting mechanism of a second metering device contained within the same unit which counts units consumed from a second supplier.
 - 3) A metering device as defined in claim 1 which has the functionality to switch to counting units of electricity within the home back to the secondary meter of the unit according to parameters which are programmed as part of the database management system, such as when the account balance reaches zero.
- 10 When the application was initially searched, three documents were cited against it:

D1² WO 01/35351 A1
"System for certified use of Electrical Energy"

D2³ WO 01/91073 A1

²http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20010517&CC=WO&NR=0135351A1&KC=A1

³http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20011129&CC=WO&NR=0191073A1&KC=A1

“A utility metering system incorporating a transaction authorisation system”

D3⁴ WO 2011/148168 A1
“Electronic payment unit, electronic payment origin authentication system and method”.

- 11 The examiner has raised objections under section 1(2)(c) of the Act that the invention is not patentable as it relates to both a method of doing business and a program for a computer as such; the relevant provisions of the Act are shown in bold below:

1(2) it is hereby declared that the following (amongst other things) are not inventions for the purposes of the 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 provisions shall prevent anything from being treated as an invention for the purposes of the Act only to the extent that a patent or application for a patent relates to that thing as such.

- 12 In accordance with established case law, the starting point for determining whether an invention falls within the exclusions of section 1(2) is the judgement of the Court of Appeal in *Aerotel/Macrossan*⁵.
- 13 Also of relevance is the decision of the Court of Appeal in *Symbian*⁶. *Symbian* arose under the computer program exclusion, but as with its previous decision in *Aerotel/Macrossan*, the Court gave general guidance on section 1(2). Whilst in the *Symbian* case the Court approached the question of excluded matter primarily on the basis of whether or not there was a technical contribution, it nevertheless (at paragraph 59) considered its conclusion in the light of the *Aerotel/Macrossan* approach. The Court was quite clear (see paragraphs 8-15) that the structured four-step approach of *Aerotel/Macrossan* was not a new departure in domestic law; that it remained bound by its previous decisions, particularly *Merrill Lynch*⁷ which rested on whether or not the contribution was technical; and that any differences in the two approaches should affect neither the applicable principles nor the outcome in any particular case. But the *Symbian* judgement does make it clear, that in deciding whether an invention is excluded, one must ask does it make a technical contribution? If it does then it is not excluded.
- 14 Subject to the clarification provided by *Symbian*, it is therefore necessary to proceed on the basis of the four-step approach explained at paragraphs 40-48 of *Aerotel/Macrossan*, namely:

⁴http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20111201&CC=WO&NR=2011148168A2&KC=A2

⁵ *Aerotel Ltd v Telco Holding Ltd and Macrossan's Application* [2006] EWCA Civ 1371; [2007] RPC 7.

⁶ *Symbian Ltd v Comptroller-General of Patents*, [2009] RPC 1.

⁷ *Merrill Lynch's Application* [1989] RPC 561

- (1) Properly construe the claim.
- (2) Identify the actual/alleged contribution.
- (3) Ask whether it falls solely within the excluded matter.
- (4) If necessary check whether the actual/alleged contribution is actually technical.

15 In submissions filed in advance of the hearing Mr Hamblett makes reference to a number of cases including *Aerotel/Macrossan*, *Pension Benefit*⁸, *Hitachi*⁹, *Microsoft*¹⁰ and *Gales Application*¹¹. A number of these are EPO case law, by which I am not bound. However, I have considered his analysis and arguments relating to each of these cases, but as I do not find them to be either helpful, or detrimental, to his case I will consider them no further.

Step 1 – Properly construe the claim

16 I do not think the claims present any real difficulties in construction as their language is clear. However, in the independent claim it is not possible to identify the essential features of the meter itself as it is defined solely by how it works within the energy accounting and distribution system. Therefore, I must construe the independent claim to be to ‘a dual source electrical metering device within an energy distribution system which in use interfaces with an account management system and manages the distribution of a first renewable electricity supply alongside the distribution of a second standard electricity supply’.

Step 2 - Identify the actual/alleged contribution

17 I am unable to find a clear and unequivocal statement from either the applicant or the examiner as to what they believe the contribution to be. Therefore, the starting point for assessing step 2 can be found in the well known statement of Jacob LJ, in paragraph 43 of *Aerotel/Macrossan*, who said:

‘It is an exercise in judgment probably involving the problems 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’

18 From the description as filed, the overall objective of the invention is described in the opening lines as being ‘to promote the most effective use of Renewable Technology Resources (Labour and Hardware) whilst at the same time creating a more open, accessible and competitive energy marketplace.’ The description goes on to say that the use of the system in conjunction with the meter will ‘...result in the most efficient utilisation of investment capital supplied by the general public. The foundation to the system links the functional, maintenance and management optimisation benefits of

⁸ Pension Benefits Partnership T0931/95

⁹ Hitachi Auction Method T285/03

¹⁰ Microsoft Data Transfer T0424/03

¹¹ Gales Application [1991] RPC 305

commercial farming methods directly to the benefits of having a private micro generating system installed on your own property,' and that the '...design specification functionality will result in a secure and much improved application of resources currently being utilised within the framework of the current feed in tariff system and ultimately benefit even those unable at present to invest directly by way of making the energy markets more competitive and hence lowering prices.'

- 19 A problem and advantage of the invention are set out in the final paragraphs of the description as being

'The most inherent and socially unacceptable applications of the Microgeneration Certification Scheme at present is the fact that the entry level into the scheme is set at the installation cost of a 1KW solar system which at present is @ £4500. Surely it would be far better if the barrier to entry was simply the cost of purchasing and registering and having installed your "Renewable Energy Sharecropping Switching Meter" opening your account, registering with your chosen Renewable Energy Supplier who sends you their chip and pin card and buying shares in the company around some accessible lower level entry point , say perhaps £1000 with investment limits so as to distribute the output from this technology in a fair and ethical manner.'

- 20 In his letter of 7 April 2014 Mr Hamblett states

'The problem which this invention addresses is one of providing a platform on which private households are able to pool their resources and then benefit from technical economies of scale that are usually only available to large corporations for the production and supply of renewable energy into their private homes'.

- 21 It is quite clear that the problem being addressed and the advantages of the invention relate to gaining economies of scale and providing potential fiscal benefits to small scale users of renewable energy.

- 22 In order to identify the contribution, I must also consider the state of the art at the priority date. A number of documents were identified in the search report of 26 April 2012, which are listed above in paragraph 10, of these the most relevant seems to be WO 01/35351 A1 ("351").

- 23 Document '351 describes a system for showing the origin of a certain amount of electrical energy generated via "green" methodologies. Green electricity is transported over the same distribution network as energy generated from conventional power sources, such as fossil fuels. A user is able to purchase a "certificate" of green energy which represents a set quantity of green energy. The "certificate" may be in the form of a chip and pin card or a code transferred in an electronic manner. A measuring and interrupting device provides a connection between the user and the electricity supply and is able to measure the amount of electricity used. The device will count the number of units of electricity used and proportionally reduce the amount of energy represented by the certificate. Once all of the energy apportioned by the certificate has been used, the electricity supply to the user is interrupted at which point the user may decide to buy another green "certificate" or to switch to a second, conventional electricity supply.

- 24 It clear from the disclosure of document '351, the stated advantages and objectives of the system and the solution proposed by claim 1 that the contribution claim 1 does

not lie in the hardware of the system, but lies in 'the account management system of a non-profit co-operative renewable electricity plant.'

Step 3 – Ask whether the actual contribution falls solely within the excluded subject matter

- 25 There is no doubt in my mind at all that the contribution of the present claim 1 is a business method. Despite Mr Hamblett's many analogies, business definitions and contentions that this is 'anti-business' and no tariffs apply, the inventions as currently claimed is clearly an exchange of goods and/or services for money, and the fact that the money is invested 'up front' makes no difference.
- 26 The business method exclusion is not restricted to financial or commercial activities, but embraces administrative, organisational and managerial activities. The exclusion should be interpreted as encompassing such tools or steps and is not limited to completed transactions. There is no requirement that a business method should involve the transfer to monies or the generation of a profit. Thus, the contribution as defined above would fall under the scope of the business method exclusion.

Step 4 - check whether the alleged contribution is technical

- 27 The contribution as identified above relates to business advantages which I do not consider to be technical in nature.

Possible amendments

- 28 I have considered dependent claims 2 and 3 and I am of the opinion that there is subject matter within dependent claim 2 relating to the functionality of the meter, namely that it can 'subtract units of renewable energy used within a residential home from a remote database account containing renewable electrical unit balances whilst at the same time interrupting the counting mechanism of a second metering device contained within the same unit which counts units consumed from a second supplier', which if suitably incorporated into the main claim would result in a patentable claim.
- 29 Document '351 does not disclose or suggest the interruption of the metering of the standard domestic supply while the renewable energy balance is in credit.
- 30 I believe that by incorporating these aspects of functionality into the main claim the contribution would not be limited to the account management system of a non-profit co-operative renewable electricity plant, but would include new hardware, in the form of a new metering device, which does not form part of the state of the art in so far as I have been made aware of it.
- 31 Whilst the problem to be overcome remains a business problem, the solution would involve a new apparatus and as such, the contribution would not fall solely within the business method exclusion.

Conclusion

- 32 I find that the invention as currently set out in claim 1 falls squarely within the business method exclusion and is therefore excluded under section 1(2)(c) of the Act. However, I believe there are possible amendments which, if undertaken, would overcome the objections considered in this decision.
- 33 Subject to these amendments being made, the application will be remitted to the examiner for further substantive examination. I shall give the applicant four months from the date of this decision to file amendments. If no such amendments are filed, the application will be refused under section 18(3) for failure to comply with section 1(2)(c).

Other Issues

- 34 Further examination will inevitably also require consideration of other issues which were deferred by the examiner in his processing of this application, in particular whether the claimed invention is inventive.

Appeal

- 35 Any appeal must be lodged within 28 days

J Pullen

Deputy Director, acting for the Comptroller