Intellectual Property Office

BL O/568/16

05 December 2016

PATENTS ACT 1977

APPLICANT	Newhula.com, Inc.
ISSUE	Whether patent application GB1217902.4 complies with sections 1(1)(b) and 14(5)(b)
HEARING OFFICER	Ben Buchanan

DECISION

Introduction

1 This decision considers the issue of whether the invention claimed in patent application GB1217902.4 satisfies the requirements for patentability as defined by section 1(1)(b) and section 14(5)(b) of The Patents Act 1977. The application was filed on 5 April 2011 in the names of Nelson Greenberg and Neil Trevick. Entitled "Virtual Exerciser Device", it claims a priority date of 6 April 2010. The application was published on 19 December 2012 as GB2492017 A. During the course of proceedings, the applicant for the patent was re-registered as Newhula.com, Inc.

2 The examiner completed the search for prior art on 2 June 2015 and raised objections to the novelty, inventive step and clarity of the invention defined by the claims. Several rounds of examination and amendment resulted in a set of claims filed on 29 July 2016 against which the examiner maintained objections under sections 1(1)(b) and 14(5)(b). A hearing was requested by the applicant on 5 September 2016. The compliance period for putting the application in order had been extended several times and was due to expire on 3 December 2016. In his pre-hearing letter of 12 September 2016, the examiner summarised the relevant objections, including a reference to preferable features of the invention included in the description which were defined as essential in the latest claims. The applicant filed skeleton arguments on 8 November 2016 in response. The applicant was represented at the hearing by Simon Cooper and Ben Jones of Adamson Jones.

Oral decision

3 At the hearing it was clear to me that the examiner had been consistent, diligent and thorough in his examination and re-examination. He presented objections under section 1(1)(b) as two strands of argument:

(i) based on the common general knowledge including a Wii™ games console and accessories and/or a smart phone;

(ii) based on a prior art document WO 2009/013679 A2.

I am grateful to the examiner for clearly and comprehensively reporting his objections in detail throughout the application process. I am also very grateful for his helpful and relevant supporting explanation of his objections at the hearing.

4 The applicant's skeleton arguments addressed each of the outstanding objections. At the hearing Mr Cooper reiterated these arguments and helpfully emphasised the characterising features of the invention. He highlighted the differences between the claimed invention and the common general knowledge and cited prior art, and explained why these claimed features were essential to realise the inventive concept and were not obvious to the person skilled in the art.

5 Having carefully considered the examiner's objections and the applicant's arguments, I decided that the objections under section 1(1)(b) were difficult to sustain. Following the approach set out by the Court of Appeal in *Windsurfing*[1] and reformulated by that Court in *Pozzoli*[2], I was persuaded by the applicant's argument. The inventive concept relies upon a selective combination of measurements which provide core data which efficiently characterises the movement of a hoop around a user's waist and which is not disclosed or suggested in the common general knowledge or the prior art. The invention relies for its implementation upon technical features which, whilst they may have been feasible prior to the priority date of the invention, would not have been obvious to a person skilled in the art of designing exercise equipment.

6 Upon applying a purposive construction to the claims as required following *Kirin-Amgen*[3], I found that the claims under consideration were clear and supported by the description as required by section 14(5)(b).

7 I gave an oral decision that the claims fulfil the requirements of section 1(1)(b) and section 14(5)(b). I noted that the description will require amendment for consistency with the claims before the application can be marked in order for grant and remitted the application to the examiner for an examination report to issue accordingly.

8 Full details of the reasoning for the decision are set out in the transcript of the hearing including my oral decision which is appended hereto.

Appeal

9 Any appeal must be lodged within 28 days

Ben Buchanan
Deputy Director, acting for the Comptroller

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[1] Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd [1985] RPC 59
[2] Pozzoli SpA v BDMO SA [2007] EWCA Civ 588, [2007] FSR 37
[3] Kirin-Amgen and others v Hoechst Marion Roussel Limited and others [2005] RPC 9

UK INTELLECTUAL PROPERTY OFFICE

Tuesday, 15th November 2016.

In the Matter of: Patent Application: GB1217902.4

Newhula.Com Inc.

Before:

MR. BEN BUCHANAN

(Hearing Officer)

and

MR. MANOLIS ROVILOS

(Examiner)

.....

Applicant represented by: Adamson Jones (Simon Cooper and Ben Jones).

.....

(Transcript prepared by:

Marten Walsh Cherer Ltd.,

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(Transcript prepared without access to case documents)

THE HEARING OFFICER: Good afternoon, Mr. Cooper and Mr. Jones. My name is Ben Buchanan, as Katherine said. I am the Hearing Officer. I am accompanied by the Examiner, Dr. Manolis Rovilos and my assistant, Eleanor Wade, again, as Katherine said. Have you had a hearing before the UK Intellectual Property Office before?

MR COOPER: No

THE HEARING OFFICER: Okay. The procedure is straightforward and simple. I will just, briefly, outline it so that we each know what to expect. I will, briefly, introduce the application to be heard, so I will run through a couple of the formalities so that they are on record. I will outline what the application relates to. I will not summarise the objection that the Examiner has raised because I think those objections are clearly set out and comprehensively on the file. Likewise, thank you very much for your skeleton arguments. They, clearly, set out your arguments in response.

What I will do, in particular, because this is a telephone hearing, is invite you to make your arguments. I will expect to intervene and certainly, towards the end, ask you a couple of questions just to clarify some issues. I will not ask the Examiner to re-state his case, as I have said, but he is here and he is able to answer any questions that you may have or points of clarification.

My objective, obviously, is to ensure that your argument is fully and fairly heard. What I would quite like to do is to

identify whereabouts there are commonalities in the approach that you and the Examiner have taken and whereabouts there is divergence. In that way, my consideration of the issue, analysis and decision are facilitated, are clearer and can be arrived at more readily. I will detail that in a moment. Is that okay? Do you have any questions about the procedure?

MR. COOPER: No; that is fine.

THE HEARING OFFICER: I shall begin. The application in question is GB1217902.4, publication number GB2492017. The applicant is now named as Newhula.Com. The compliance date, which has been extended, is currently set as 3rd December 2016. The most recent claims on file, those which, it is my understanding, this hearing is based on, were filed on 29th July 2016.

The issue to be decided, as set out in the Examiner's pre-hearing letter, is under section 1(1)(b) inventive step, whether the claims define an inventive step. There is also an objection outstanding under section 14(5)(b) relating to the clarity and support of the claims in the light of the description. Both of those issues are set out for the purposes of the hearing. Therefore, I shall be required to make a decision on each of those points.

There is a second part to the objection under section 14(5)(b) relating to miscellaneous references in the description, two features which are defined as essentially in the claim but referred to in the description as "preferred".

In the event that I find in favour of the applicant, and given that there is a period of time remaining before the application needs to be put in order, the applicant will have the opportunity to make amendments to address that last point of the objection under section 14(5)(b). Just to be clear, if I find that the claims are allowable, the applicant will be given the opportunity to make amendments to the description in order to put the application as a whole in order. Is that okay?

MR. COOPER: That is fine.

THE HEARING OFFICER: These are my words now, interpreting the application as a whole, the application relates to a method of detecting repetitive movement of a user's waist as if mimicking the movement of a hoop, and consists of measuring G-forces along X and Z axes, comparing that measured data with reference data in a memory, which is being independently stored and has originated from users previously, providing feedback, according to the correspondence, between the measured data and the reference data, and using minimum and maximum G-force measurements to determine a time period for the movement -- that is the movement measured at the waist of the motion of the user's body -- and comparing that measured time period with a target from the memory. In other words, the application measures waist movement, rotation, in the manner of operating a hula-hoop, and speed, and compares with the

target data before providing feedback to a user. So it measures rotation and speed consistent with simulating a hula-hooping action.

The Examiner has most recently set out two lines of objection, alleging that the invention fails to define an inventive step. Those two lines of objection are based, firstly, upon the common general knowledge and the availability of devices with accelerometers built into them, including phones and Wii handheld controllers. The Examiner also references a Wii balance board, which takes measurements simulating a user using a hula hoop.

The second line of objection is based on a patent document published as WO2009/013679 and references specific details of the application in making the objection. In each case the Examiner follows the four-step test for assessing obviousness set out in Windsurfing/Pozzoli[i]. You referred to the same test in making your skeleton arguments. Can I assume that we all agree that the approach under Windsurfing/Pozzoli[i] is the right approach to take when assessing inventive step?

MR. COOPER: Yes.

THE HEARING OFFICER: Thank you. As I have already suggested, I will not re-state the objections in full which the Examiner has set out because you have had the opportunity to consider those in detail. Also, as I have hinted, I would invite you, if I may, when setting out your argument, to highlight

whereabouts you consider yourselves and the Examiner to be in agreement. For example, you may disagree on who the person skilled in the art is but you may agree on aspects of the common general knowledge or vice-versa in order to facilitate subsequent consideration of the obviousness of the application.

Finally, I will just draw your attention again to the objection under section 14(5)(b), which relates to the clarity and support of the claims, and invite your comments in that respect as well as on inventive step, please. That is my introduction and scene setting. If you are content, you have the opportunity to ask any questions. Otherwise, I invite you to begin your argument for the applicant, please.

MR. COOPER: I am going through the test for inventive step, based on the common general knowledge starting point or state of the art. First of all, a person skilled in the art, as we have put it in our arguments, would have knowledge of virtual exercise devices. The point of difference with the Examiner is fairly similar. The Examiner has gone for the design of electronic equipment for use in personal training, knowledge of measuring devices and elements. We are lacking in evidence on the common general knowledge at the moment. The situation back at the priority date -- 2010 -- is quite different between now. Lots of these devices were in their infancy. We do need to be careful about importing knowledge from post 2010 into a person

skilled in the art at 2010. It was not as usual to use electronic devices and sensors for physical activity. We have been not quite going as far as the Examiner on persons skilled in the art, but there was certainly a design of exercise devices. They would have had knowledge of things like the Wii because they were so-well known as virtual exercise devices. Going on to the common general knowledge of that person, we think they would have been aware of portable devices that include accelerometers. It was very days of smart phones with accelerometers in at that time. The Wii was around. It was very different to anything that had gone before, but that certainly had accelerometers in. That would have been known, at least in the controller. It would have been known that the Wii, in particular, was used for simulating sporting activities. So, at the very least, I think it would have been known that if you played tennis or tenpin bowling, by holding the controller and moving it, that would translate into simulation on the Wii device.

In terms of smart phones, I have not seen any evidence of the extent of any sporting simulation that was used on phones at that time. They would have been aware that accelerometers were in phones but in terms of simulating sporting activities, I have not seen any evidence of that. The next is identifying the inventive concept of the claim in question, or construe it. I think your summary of

what this application is about is close to what we believe is the inventive concept. I set it out clearly in the skeleton argument. I think the only point I would pick you up on, or words, is that you have mentioned comparing speed and timing. Measuring speed and timing and talking about comparing timing, it is maximum and minimum values of acceleration and the period between those that is compared with maximum and minimum values of acceleration that appear for the reference data. It is that particular data that is being compared. The inventive concept is the provision of a method of training for the user to move a hoop around the waist. From the evidence, it has been suggested that the Wii balance board had a hoop simulator. We have not seen details of that, but we are not aware of any other simulation of moving a hoop around the waist. The inventive concept is to provide this method using electronic measurements for G-forces along the horizontal axis, comparing those values of G-forces and the period there between the target data from a range of previous users, and then providing feedback to the user in real time in order to provide the training aspect. This enables a lightweight, portable accurate training device for a user moving a hoop around the waist, which did not exist back in April 2010. In terms of the common general knowledge and moving on to the differences that exist, you have seen from the skeleton arguments that we base that on the Wii balance board, because

that was how the Examiner had set it out in the objections. You talk about the accelerometer and the Wii controller. That is related. If we concentrate on the balance board for now, the balance board -- we have not seen a great deal of evidence about this -- we understand that it had load sensors under the feet and it was used for simulating fitness and sporting activities, and it came up as part of or was an accessory for the Wii games console, which also included a Wii controller, which did have an accelerometer in it.

In terms of the balance board, as we have said, it measured pressure and sent that pressure data to the Wii console for simulating the sporting activity. At the very best, in terms of moving a hoop around the waist, it can only infer movement of the user's waist from that pressure data. There were no G-force measurements. None of the measurements or comparisons set out in the claim are actually in the Wii balance board at all. In terms of differences, it was very different. In fact none of the features in the claim are there other than, possibly, the fact that there is a simulation of moving a hoop around the waist.

Moving on to do those differences constitute steps which would be obvious to a person skilled in the art? Do they require invention? In going through those, the first point is that the balance board did not have an accelerometer in it. The person skilled in the art would have been aware of

accelerometers in, for example, the Wii controller and smart phones but none of those were adapted for a trainee user to move a hoop around the waist. We have not seen any evidence, actually, of any of those devices being used for anything other than hand manipulation. So in terms of the Wii, moving it in the form of a tennis racket or phones. We have not seen any evidence at all in relation to those. Certainly, nothing that indicates anything other than hand manipulation of those devices.

In terms of where we differ from the Examiner, a lot of the difference is in relation to whether a person skilled in the art would consider these differences. The principal difference between our approach is that we feel that the Examiner has used the benefits of hindsight. Nowadays, these devices are much more prevalent, but back in 2010, as evidenced by the Wii console itself, accelerometers were not used to the same extent as they are now. The Wii console itself used the balance board rather than accelerometers strapped to different parts of the body for simulating sporting activity.

In terms of what would be obvious to a person skilled in the art, a person skilled in the art could well have considered adding an accelerometer to the balance board, although the balance board would have to be moveable, which I don't believe it was. That would have been to detect the

movement of the feet, obviously, not the waist. The controller has an accelerator in it but, again, there is no suggestion that that could be used in relation to other parts of the body.

We have no evidence of either Wii balance board or the controller comparing measured forces and tying them with target data collected from a range of previous users. Again, from what we recall, the way a Wii would work is that simply they would detect movement of, for example, a tennis racket or a hand and simulate the result of that movement on a games console. We have not seen any evidence of even those devices being used to actually compared measured forces and timing in relation to target data collected from previous users, for example, for the purposes of training, and, similarly, providing feedback in real time in relation to indicating a degree of correspondence between that measured data and target data. We have not seen any evidence of this in relation to other smart phones either. Although, as I should mention, nowadays, over six-and-a-half years later, that type of arrangement is much more prevalent. Obviously, that is not relevant to assessing inventive step in 2010.

Finally, the point about the complexity of the hoop and waist movement. Part of the inventive concept is realising that to take huge amounts of data and make any kind of meaningful comparison from it in relation to moving a hoop

around the waist would be very difficult. The inventive concept includes the particular selection of maximum and minimum acceleration values, timing, in the two axes only and making a comparison of that data with corresponding reference data to provide a meaningful result using efficient processing of the data. Again, we have not seen any evidence of a person skilled in the art with any of this being part of the common general knowledge. Again, the Examiner has talked about fitting data is obvious, but this is about particular selection of core data for a particular application. You have mentioned speed in your discussion at the beginning. In actual fact, this is more particular than that, it is maximum and minimum acceleration values, which we believe is not an obvious selection of the core data. It is core data that the inventors have found to be particularly key to identifying an ideal motion for moving a hoop around the waist and, therefore, ideal core data for providing this comparison without excessive complexity.

THE HEARING OFFICER: Can I invite you to pause for a moment, because I want to highlight one thing and ask another? Is that okay?

MR. COOPER: Yes; that is no problem.

THE HEARING OFFICER: The first thing is to highlight that you just corrected my summary of how I saw the application. You have referred to it again very recently, just now. If I said that

the application was characterised by measuring the speed and timing data, then I apologise. I would correct that. What I had intended was that it is characterised by measuring acceleration and G-forces along the X and Z axes, comparing that with reference data and also with determining a time period for the motion and comparing that with the target, which I think is what claim 1 defines. Does that assure you that my summary of the application is correct?

MR. COOPER: Yes.

THE HEARING OFFICER: Thank you very much (a) for identifying that, and (b) for drawing it and explaining it as you have. I now understand clearly that, as you have summarised, in order to enable the invention to be put into effect it is necessary to measure acceleration data and detect the repetitive movement so as to mimic a hoop, and determine a time period for that movement and process it, as you have explained, in order to enable a comparison with the reference data which allows the complexity of the data, which is inherent in a hooping movement, to be feasibly processed and to put the invention into effect. Is that fair enough?

MR. COOPER: Good. Okay. Thanks.

THE HEARING OFFICER: Are you halfway through or are you, more or less, at the end of presenting your argument?

MR. COOPER: That was the balance board; yes. So there is only the PCT publication.

THE HEARING OFFICER: Okay. If I can just pause at the balance board and ask Manolis whether there is anything that he wants to ask you to clarify or just to reflect on in light of the objection that he has made.

THE EXAMINER: On thing I would like to clarify is that using a portable accelerometer in order to simulate or fit data having to do with exercise was not unusual in 2010. The WO patent is an example of that, but its date is 2009. Most, if not all, of the parallel documents that have been identified and various examination reports, are prior to 2010. What I want to say is that the technique of fitting and using accelerometers to the feet and exercise data was well used and well known in 2010.

THE HEARING OFFICER: Thank you, Manolis. Although as you have pointed out, Mr. Cooper, the prior art does not specifically disclose measuring movement using accelerometers and fitting it to data in the context of the Wii balance board or a hand-held controller in detecting waist movement, Manolis is alleging that it would have been known how to do so, even though it is not explicitly disclosed in the prior art, or the common general knowledge as is referred to in the first part of the objection.

MR. COOPER: Obviously, a small number of published patent applications does not indicate common general knowledge. We have not seen any evidence of the common general knowledge at

that time, including this technology. We did request at some time during the examination for more evidence of this common general knowledge that has been relied upon, because it is relied on heavily in the examination reports because, as far as we were aware, and the inventors had told me, it was not well known at the time. This type of technology was very much in its infancy. Possibly, the small number of patent documents that have been identified actually indicate the forefront of this technology, not Philips trying to obtain patent protection for something that was part of the common general knowledge. It is quite the opposite.

THE HEARING OFFICER: I would note that in your most recent comment you had identified five differences between the invention as it is claimed and the common general knowledge, taking account of the Wii balance board and the Wii hand-held controllers. I will invite you to proceed and run your arguments against the strand of objection based on WO2009/013679, please.

MR. COOPER: This document discloses advice and method for physical training. It has sensor means, and a number of different sensors are discussed. One of those that is mentioned is an accelerometer. Looking at the differences, one thing to mention is that although the introduction for this document talks about physical exercises very broadly, it quickly focuses on free-weight exercise, and most of the document is about detecting movement of free-weight exercise and comparing

that to a store-template pattern. There is no suggestion or specific explanation of how any other type of exercise could utilise the technology disclosed in this document. In relation to the free weight, it is all about ensuring accuracy of movement of the free weights to ensure effective training and reducing the risk of injury.

In terms of the differences that exist, first of all, there is no disclosure of a method of detecting repetitive movement of the user's waist as if mimicking the movement of a hoop. There is no electronic measurement of G-forces along horizontal X and Z axes when the user repeatedly moves the waist in real time, as defined by claim 1. As we put in previous submissions, the only specific measurement of acceleration that is discussed in the application is to detect jerk or jitter of a dumb bell. Instead, the application focuses on position. The Examiner did point out and allege that the accelerometer is likely or may well be used in order to determine that position. Therefore, acceleration is being measured. We do not agree with that, because we think the use of an accelerometer to measure a position is measurement of a position, not acceleration. Even if that were the case, there is no comparison of maximum/minimum values of G-forces and the period those maximum and minimum values of G-forces disclosed in this document in comparison with target data. Instead, its values a position that are compared.

There is also no disclosure of data being collected from a range of previous users. Instead, the specific embodiment talks about taking the data from the operation step by the user themselves. The (unclear) data is not restricted to the horizontal X and Z axes either.

Moving on to whether these steps would have been obvious, this document does not consider use of a device and a method for training the user to move a hoop around the waist. In the common general knowledge, we are only aware and we have only seen evidence of the balance board for doing anything similar. First of all, we do not believe that somebody looking at this document would even think of using this for simulating moving a hoop around the waist, particularly as it very much talks about ensuring accuracy of path of moving to free weights, which is quite different to the kind of technique required to moving a hoop around the waist, which is, as our inventors have identified, more dependent on things like core data of acceleration and timing. Even with the common general knowledge, the person skilled in the art would understand that the complexities of moving a hoop around the waist would make it very difficult to provide the technology disclosed in this document to that application.

It does not consider measuring G-forces along a horizontal X and Z axes where the user repeatedly moves away from real time. Again, this document is about accuracy of

movement in terms of position and only specifically it mentions measuring acceleration and comparing acceleration in detecting jerk or jitter of a dumb bell. So there is nothing to point a person skilled in the art to measure maximum and minimum values of acceleration or the time period between or comparing that data to correspondence reference data. If anything, what this document teaches is about detecting and comparing position to ensure accuracy of movement rather than detecting maximum and minimum values of acceleration and the time between.

Finally, there is the choice of the two axes. That forms part of selection of the core data of the invention. This document does not consider the problems of complexity of data because the data they are looking at is much more straightforward and three dimension is extremely important to the movement of free weights. It is not an obvious step from the disclosure of this document to select the particular core data of the invention or to restrict to two axes of measurement, either.

Sir, do you want me to stop there or shall I go on to clarity and support?

THE HEARING OFFICER: No. Let's stop there, thank you, before we proceed to the third point. I will, very briefly, summarise. In identifying the teaching of WO2009/013679 and setting out what WO2009/013679 does disclose, you have explained that it is directed

towards an invention which provides a means for measuring the displacement, in one embodiment, a dumb bell, and in another, I believe, a device attached to a user's waist, between two extremes of movement, but it is necessary to measure the movement of the device using accelerometers, whether it is acceleration or positional data, ultimately, that is used, in order to track the movement in three dimensions between two extremes. The movement is not compared with reference data from a plurality of users but it is compared with data initiated by the user themselves in either training the piece of equipment or beginning their routine; that it does not specifically disclose measuring the movement of a waist in a hoop movement, and it does not specifically disclose restricting the measurement of acceleration or positional data to only two axes because it is inherent, and for the implementation of the invention it is necessary to do so in all three dimensions.

You have then identified that the current invention is differentiated in those ways. By my reckoning, you have, again, identified five differences between the current invention and the prior art, WO2009/013679. Do you want to make any comment as to why it would not be obvious for a skilled person to implement those differences?

MR. COOPER: Yes. I think you might have missed out the acceleration point--maybe you do not agree with that--in

particular the measurement of the maximum and minimum values of acceleration, and then comparing those to reference maximum and minimum values of acceleration, which I do not believe is disclosed in that document.

THE HEARING OFFICER: That is fine. That was an oversight rather than intentional on my part.

MR. COOPER: That is fine. Summarising those differences--I have spoken about each one briefly in turn--the overall reason is that this prior art document does not consider comparing maximum and minimum values of acceleration or the split into two axes because it is quite a different application, an application that relies on accuracy of position, not comparing acceleration and timing values. It has not considered its application to moving a hoop around the waist. We believe it would not be obvious to consider using this technology for moving a hoop around the waist because of the challenges involved, which the inventors have overcome but this document has not.

THE HEARING OFFICER: Yes. Those challenges are the complexity of the movement of the hoop around the user's waist; is that correct?

MR. COOPER: Yes. Those are the challenges. Obviously, the solution is provided by the particular data comparison that is set out in the claim.

THE HEARING OFFICER: Thank you. Manolis, is there any observation

or comment that you would wish to make?

THE EXAMINER: I would like to clarify that, according to my understanding of the document, the device taught in WO2009/013679 is not only about moving a dumb bell? It is about, generally, being done in a gym. A dumb bell is just an example. There is a figure (3) that depicts how it can be used to measure this accurately the movement of a user's waist.

The other point I would like to make is that the acceleration data is the raw data that the device taught uses. There is some mention about a magnetometer and a gyroscope being used in order to detect movement from one point to the other. Out of the three measurement devices that it has, only the accelerometer is the one that can be used. It specifically says that the time between first and second extreme positions may be calculated. That is the definition of a period. So it does calculate a period based on acceleration data.

THE HEARING OFFICER: Thank you, Manolis.

Mr. Cooper, do you have any response, if you would like to, and then if I could invite you to move on to the clarity and support objection after that, please.

MR. COOPER: Just dealing with those points, figure 3 does show the device on a waist, although there is very little in the application about how that would work and, in particular, whether it would work in any different way to the device that is on the dumb bell. As far as the application presents, it

appears as though it works in exactly the same way, which is about initial inaccuracy of the movement on position, and nothing to do with maximum and minimum values of acceleration. The accelerometer, by producing the raw data, might be so, but the document is about position, not maximum and minimum values of acceleration. As to the data, there is nothing in the document that talks about comparing maximum and minimum values of acceleration or that being restricted to two axes.

The final point is about the time period. It does talk about a time between two extreme positions, but not between the maximum and minimum values of acceleration, which are necessarily the extreme positions. There is a question mark on whether that time period is specifically disclosed. In any event, there is still no disclosure of measuring the maximum and minimum values of acceleration and comparing those in the two axes defined in the claim.

THE HEARING OFFICER: Okay. If you would like to proceed to the objection which is put forward relating to clarity and support under section 14(5)(b), please do so.

MR. COOPER: The principle objection is to this wording "only the horizontal X and Z axes". Our view, in the context of the application, is that it will be clear that the horizontal X and Z axes correspond to the definitions later in the claim, which is that the X axis represents forward and backwards

movement of the hips, and the Z axis represents lateral movement at the user's hips. This is a method claim. This method, if performed upright, would be perfectly accurate. We believe, in the context of the application, that it is clear and supported. However, if you do not agree with that and want us to amend, then the Examiner did suggest that we defined the axes as being perpendicular to the axis of the user's body. That is one possibility. Although a simpler possibility may be simply to remove the word "horizontal" because of the definition of the X and Z claim. I think we would prefer that amendment, if we have to make an amendment, but if that is not acceptable either, then we would look to defining it relative the axes of the user's body, as suggested by the Examiner.

THE HEARING OFFICER: Okay. That is very constructive. Thank you. Manolis, do you have any thoughts having heard the succinct argument from the applicant in favour of section 14(5)(b)?

THE EXAMINER: No. My problem was that the word "horizontal" is very specific. It is not exactly what is meant. If it is removed or substituted by defining it with respect to the user's body, it would be fine with me.

THE HEARING OFFICER: Thank you. Right. Mr. Cooper and Mr. Jones is there anything further you want to take the opportunity to add to your argument or to ask of the Examiner?

MR. COOPER: No. I think that is everything, thank you.

THE HEARING OFFICER: Manolis, is there anything that you want to

enquire of the Applicant or emphasise by way of your objection?

THE EXAMINER: There is one point having to do with the complexity of the data and how it is addressed. I do not think it is explained in the claims or in the description how the complexity of the data is addressed in another way than just measuring a period and an amplitude (unclear) and comparing that with what an expert user would do. My viewing of it is that all of this complexity is dealt with by having an optimum movement and comparing it to that, not by a more complicated way.

THE HEARING OFFICER: Okay. So you are seeking assurance that the way of overcoming any difficulties to do with processing a very complex set of data are achieved through limiting measurement to two axes and comparing with reference data from a number of users?

THE EXAMINER: Yes.

THE HEARING OFFICER: Is that consistent with your understanding, Mr. Cooper?

MR. COOPER: Yes; although it is the particular data and the particular reference and comparisons defined in the claim that provides the invention. If you generalise, as the Examiner said, it is just selecting a periodic function and comparing it to data. Then you are not actually seeing the invention, which is the particular data that has been selected, which is

the acceleration data being compared which, as we saw in the prior art -- it is in that PCT document -- would have been positioned. If you followed the teaching of that document, you would start taking the position of the device and trying to compare that position of reference data, which would be a much more complex and very difficult calculation to do. The invention is about selecting the particular maximum and minimum acceleration data and the time period between those maximums and minimums, not just selecting particular data. We need to be careful to ensure that it is the particular features of the claim, not a more generalised version that is compared to the prior art.

THE HEARING OFFICER: That is critical to implementing the invention to mimic movement of a user's waist as though moving a hoop?

MR. COOPER: Yes.

THE HEARING OFFICER: Good. Got it. Right.

At this point, I would normally attempt to summarise where we are with respect to the argument and the objections which were set out to begin with. I think I will do that so that I can be absolutely certain that I have covered each key point and that my terminology -- referring to maximum and minimum of acceleration and not speed, and so on -- is complete and correct for the record. If you could just bear with me whilst I do that. I will then give you the

opportunity at the end just to clarify anything I may have either overlooked or inadvertently referred to incorrectly. I will quickly summarise what will happen next. Is that okay? I am going to try and keep this succinct, although it is not my strong point.

In respect of the inventive step objection, which is set out on the basis of the common general knowledge and the Wii balance board, the applicant has identified the skilled person as a designer of exercise devices, with a knowledge of virtual exercise machines. One of the points you made up front was that at the time of the planned application being filed, many of the devices which have been discussed throughout the life of the application were in fact in their infancy. We need to be careful only to apply the knowledge which was in existence in 2010, which is acknowledged as including the Wii games console, the balance board and the Wii hand-held controller, and of early smart phones with accelerometers built in.

You acknowledge that the Wii games console has been used to simulate sporting activities and has used three-axis accelerometers in the hand-held controller to do so, but you have seen no evidence of simulating sporting activities on smart phones as of the filing date of the application.

Furthermore, although an application to measure the movement of a user's waist in conjunction with a Wii games console has been acknowledge in conjunction with using the Wii balance

board, there has been no discussion of a specific example of any device which measures acceleration and, thereby, movement of a user's waist in identifying the movement of a user's waist in mimicking a hoop movement.

The key point that we have referred to a number of times in respect of the current application is that the measurement taken is of G-forces of acceleration at the user's waist, the identification of minimum and maximum of those G-forces and comparison of the hoop movement for correspondence with reference data from users, and a determination of a time period for that movement, the important point being that the combination of the time period and the detection of the hoop movement are consistent with hula-hooping, which is what the application sets out to enable a user to simulate and, indeed, to train for.

You contended that the Examiner, potentially, risked using hindsight in some of his reasoning, in particular in demonstrating that certain adaptations of the prior art would have been obvious and might then have arrived at the invention which is defined by the claims. However, by my reckoning, you identified about five differences, those being that the Wii balance board did not use accelerometers, and there was no disclosure of using a device which incorporated accelerators attached to the user's waist area; that modifying the Wii balance board to use accelerometers would have required the

balance board to be moveable, but our believe is that it is not usable; that the Wii balance board adaption, in the light of the common general knowledge, would still require the step of comparison with the measure movement with the target time. The only disclosure that we are aware of is to take the input from the Wii balance board and use that to simulate movement for display on a television screen via a games console but not specifically for comparison with reference-target time. Similarly, there was no specific disclosure of feedback to a user on the correspondence between the measured movement and the reference data. Neither, as you observed, was there any evidence of feedback on that correspondence with the smart phone application. Finally that the complexity of hoop and waist movement is adequately modelled in the invention as claimed through, and I will say it again, the measure of acceleration data identifying minima and maxima acceleration, and so determining a hoop movement because that acceleration is measured in two axes, X and Z, and determining a time period between periods of that movement and in two axes only, all of which is (a) sufficient for modelling hoop movement of the user's waist and (b) overcomes issues resulting from potential complexity of measuring hoop movement in three axes. Moving on to the objection to invention based on the WO document, which is WO2009/013679, you identified that the purpose of that invention is to ensure the accuracy of

movement of the device, in one embodiment a dumb bell or a free weight, and in another a device that is actually used as weights, to ensure the movement of that free weight during training, the movement between two extremes measurable between two positions in three dimensions. You identified again about five differences between the current dimension and that prior art. The first being that in the prior art document, WO2009/013679, there is no specific disclosure of determining a hoop movement of a user's waist. Now, as the examiner has pointed out, Fig. 3 does disclose that the device can be attached to a user's waist to measure movement, however there is no specific disclosure of that movement being hoop movement.

Secondly, that measurement of the positional data which might be done through the use of accelerometers, is done in all three axes and there is no specific disclosure of it being limited to two axes. The examiner contends that there is no reason why it should not be limited to two axes but your argument is that there is an advantage in limiting it only to two axes, as I have already referred, because that is consistent with what is necessary in order to simulate the hoop movement of the user's waist but overcomes issues resulting from the complexity of modelling that movement in three dimensions.

Thirdly, that in WO2009/013679 there is no specific comparison of minima and maxima acceleration in measuring the

user’s movement, waist movement, whether it be a hoop movement or not, and a time period. There is disclosure of measuring a time period for movement between two extremes, but not in conjunction with the minima and maxima of acceleration in hoop movement at a user's waist. There is no disclosure in WO2009/013679 of comparison between the measured movement of the device and reference data from a number of users, but rather with template, what is referred to as template data between two extremes which might be provided by the user at the beginning of their routine or might previously have been provided by that user using that equipment in order to effectively train it, set the template for the subsequent use.

I have probably covered most of what my next few notes say. So, the only disclosure is for measuring movement between two extremes of free path movement. The acceleration is measured but positional data is determined from that measurement. The examiner has pointed out that it would be perfectly feasible to use accelerometers in determining position of data for comparison with the template data. I am not sure we fully resolved whether or not there was agreement on whether that was consistent with measurement between minima and maxima of acceleration. I suppose at the extremes of the free path movement acceleration would probably at a maximum as the device changes direction. Perhaps we can leave that point for the time being.

There is no disclosure in WO2009/013679 of considering the complexity of movement of a user's waist if they are mimicking hula hooping as the current claims are limited to, and in fact you contended that WO2009/013679 actually requires the measurement of positional data in three dimensions in order to work with free weights movement between two extremes which can be between any two points in a space.

You explain that as being because WO2009/013679 is directed towards a different application. You then said, so it would not be obvious to use WO2009/013679 to simulate a movement of a model or measure the movement of a simulated movement of a hoop around a user's waist because it is directed towards measuring between two extremes of free weight.

At that point, the examiner did point out that WO2009/013679 at Fig. 3 specifically disclosed the use of the device around a user's waist and that is in the context of the description which clearly explains in the application is directed towards measuring movement between two extremes position.

You acknowledge that there is very little detail around Fig. 3 and that the accelerometer measures between minima and maxima positions but there is no disclosure of that being a minima and maxima of acceleration which, as we have already identified a couple of times, is a key characteristic of the current invention, because that in conjunction with determining the time period of that movement, is key to

modelling and therefore enabling the user to simulate the movement of a hoop using their waist in a hooping motion. We then moved on to the point under section 14(5)(b) which deals with clarity and support and you argued that the definition -- I am just going to retrieve the claim -- the definition in the claim of at least horizontal X and Z axes is qualified in the final paragraph wherein the values associated with the X axis represent forwards and backwards movements of the user's hips, and the values associated with the Z axis represent lateral movement of the user's hips. You suggested that in the context of the claim that is clear because given the purpose of the invention, in measuring hoop movement of the user's waist in two axes, one axis representing forward and backward movement, and the other axis representing lateral movement, orthogonal to the first axis, is horizontal from the point of view of the user and the position of their body when the invention is in use.

There was some discussion over the minor amendments to the claim, if necessary. Is that a reasonable record of where we are so far?

MR. COOPER: Yes, I think so.

THE HEARING OFFICER: Good. Did I miss out anything critical or say anything which you would wish to take the opportunity just to clarify?

MR. COOPER: The only thing I would mention is that (unclear) in

relation to the published PCT document that in the claim it is a specific comparison of these maximum/minimum values of acceleration, so although in that document the extreme position could in some applications correspond to a maximum and minimum of acceleration, there is no specific disclosure of the particular comparison in the claim. That was just one small point.

I think the only other thing was the time period that we have referred to several times. It is important that the claim defines that as period determined between the maximum and minimum values and not just any time period of the motion.

THE HEARING OFFICER: Right.

MR. COOPER: It is that particular time period. They are the only two things. I thought in general that is a fair summary of the position.

THE HEARING OFFICER: Good. Okay. Thank you. Right, what would normally happen is that I would say that we endeavour to write and issue decisions within nine weeks of the hearing and that there is a statutory 28-day period for appeal. Currently, we have just over two weeks left until the compliance period, which is set at the 3rd December 2016. So, I am minded to issue an oral decision which means I will issue my decision now. In so doing I will endeavour also to give my reasons orally. That is why I have been so keen to be clear about the position of the examiner as he set out his objection, and the

position of the applicant as you have set out your arguments, and my own understanding as well as the record on file. The oral decision will be transcribed and issued in writing and I think I will just suggest that where clarifications are helpful, they will be provided when that transcript is created. Are you content for me to issue a decision now?

MR. COOPER: Yes. That is fine.

THE HEARING OFFICER: Good. Okay. There is going to be quite a lot of rustling of paper and I may make one or two pauses, so please bear with me.

ORAL DECISION

Regarding application GB1217902.4, which is published as GB2492017, applicant Newhula.Com, extended compliance date expiring on 3rd December 2016 and with regards to the current claims on file which were received by the office on 29th July 2016, I will address the objections set out in the examiner's pre-hearing report under section 1(1)(b) regarding inventive step, and under section 14(5)(b) regarding clarity and support.

I will not address the point under the section 14(5)(b) objection relating to miscellaneous references in the description versus essential features defined in the claim because those will require amendment in order to bring the application in order for grant.

The application relates to a method of detecting repetitive movement of a user's waist as if mimicking the movement of a hoop comprising measuring G-forces, hereafter referred to as acceleration along X and Z axes, comparing that measured data with reference data in a memory, which has been independently stored previously from a plurality of users, providing feedback according to the correspondence between measured data and the reference data to a user, and using minima and maxima measurement of acceleration to determine a time period for the measured body motion. To be clear the time period is the time period between minima and maxima of measured acceleration, and comparing that measured time period with a target time period from the memory.

The correct approach to assessing whether the application comprises an inventive step has been agreed between the examiner and the applicant as following Windsurfing/Pozzoli[i]. I would also note that the correct approach to construing the claim and identifying the inventive concept is found in Kirin-Amgen[ii], full references will be provided in the transcript.

Four steps of the test require identification of the notional person skilled in the art, identification of the relevant common general knowledge of that person, identification of the inventive concept of the claim, as construed, identification of the differences between the state

of the art and the inventive concept, and then assessment of whether or not those differences constitute steps which would have been obvious to the person skilled in the art.

The examiner has identified the person skilled in the art as the designer of electronic equipment for personal training with a knowledge of different types of measuring devices and elements such as accelerometers, gyroscopes, and magnetometers. I would characterise those as sensors, particularly accelerometers, and including data analysis techniques as well as knowledge of different types of exercises, such as training, during training, such as hula hooping, and their particularities.

The applicant has identified the person skilled in the art as the designer of exercise devices with the knowledge of virtual exercise devices. Whilst I do not regard those two identifications of the person skilled in the art to be consistent, I think they do allow me to proceed and come to a reasoned decision.

The designer of electronic equipment for personal training as a starting point for the examiner's argument I find to be difficult to rationalise in the subsequent argument in respect of the common general knowledge as it applies specifically to games consoles and Smartphones. Those two fields may overlap but they are not the same.

I therefore look to the definition of the person skilled

in the art as defined by the applicant being the designer of exercise devices with a knowledge of virtual exercise devices. Within the context of virtual exercise devices I would consider applications such as sports games for the Wii console and exercise training devices, such as the kind of device set out in the patent prior art considered.

The person skilled in the art I am identifying as the designer of exercise devices with a knowledge of virtual exercise machines.

The common general knowledge is perhaps slightly less contentious. The examiner has identified it as sensors including accelerometers, data analysis, and a knowledge of training and exercising routines, including hula hooping. Whilst I think that is consistent with the approach he took to identifying the person skilled in the art, as I have said, I find it difficult to reconcile with the objection which is set out using the common general knowledge comprising a games console, and a Smartphone.

The applicant has identified the common general knowledge as portable devices, including, and I may be paraphrasing here I hasten to add, portable devices which include accelerometers, such as Smartphones, and including the Wii games console, including balance board and hand-held controllers, which provide sporting simulations and may be used in a training or keep-fit purpose.

Again, I think that is consistent with the definition of the person skilled in the art being a designer of exercise devices, having a knowledge of virtual exercise machines, including the application of games consoles for training and for providing simulation of sporting activities.

In construing the claim, I have identified a slight difference in approach between the examiner's approach and the applicant's approach but again I think those can be rationalised.

In your skeleton argument, the applicant has construed the claim so as to identify the inventive concept. In fact, the passage referring to the inventive concept describes the provision of a method of training a user to move a hoop around the waist, which is a key point I shall come back to.

The examiner has construed the claim slightly more literally and he has identified in his pre-hearing letter that the claim seeks protection for a method of detecting repetitive hooping movement of a user using an accelerometer, and so on. Indeed, that is more closely reflective of the language of the claim.

I set out my own summary of what the application relates to earlier and that is the definition I shall use but I shall specifically identify as key features the following: that the invention as defined by the claims detects repetitive movement of a user's waist, as if mimicking the movement of a hoop;

that it measures acceleration along X and Z axes substantially horizontally and consistent with the movement of a user's waist; that comparison between the measured data and reference data previously independently stored from other users, is carried out and feedback is provided according to a correspondence between the measured data and the reference data; that a time period between minimum and maximum acceleration measurements is determined and compared with a target time period from the memory.

The emphasis on those points is consistent with my interpretation of the inventive concept as being the measurement of acceleration in a substantially horizontal plane to detect a repetitive movement as though mimicking the movement of a hoop and identifying the time period between minima and maxima of acceleration because those two are consistent with the characteristic movement of a user's waist as they are mimicking the movement of a hoop.

With that inventive concept in mind, and as I have referred to previously, I have found it difficult to support the objection in light of the applicant's comments that the common general knowledge and the Wii balance board are indicative of the claimed invention being obvious.

In the common general knowledge as it is set out and with reference specifically to the Wii balance board, including optionally a hand-held controller, there is no

disclosure or suggestion of detecting repetitive movement of a user's waist so as to identify a hoop movement. The only disclosure is of detecting movement of a user's feet so as to infer movement of a user's waist.

There is no disclosure of detecting movement of a user's waist using G-force measurements, using an accelerometer whilst it is being acknowledged that the use of accelerometers in devices such as the Wii hand-held controller and a Smartphone with an accelerometer was known at the time of the filing of the application, there is no disclosure of either of those means measuring movement of a user's waist nor measuring hoop movement of a user's waist.

The current invention measures user's waist movement only, or uses measurements of the user's waist only in two axes, the orthogonal axis X and Z in the horizontal plane, and there is no disclosure in the common general knowledge or the Wii balance board that have been outlined in the objection or considered in this hearing in respect of comparison of measured user movement data with reference data independently stored previously from other users.

I would take the opportunity to point out that the applicant has identified a number of key differences, which I shall summarise in a moment, between the claimed invention and the common general knowledge and the Wii balance board on which the examiner's first objection is set out, and I find

that that argument is persuasive.

Those differences are that in as much as a Wii balance board may be used to provide a simulation of hula hooping, it is done so using measurements of force from the feet and therefore only inferring movement of a user's waist and is not done using measurements of acceleration and therefore by detecting repetitive movement such as set out in the claim.

Secondly, that had acceleration measurement been incorporated in the common general knowledge and the use of the Wii balance board it would have required modification to the Wii balance board for it to be moveable and there has been no suggestion or disclosure put forward that that would have been obvious to do, that is, to modify the Wii balance board.

There is no comparison with a target time disclosed or suggested in respect of the common general knowledge and the Wii balance board, rather the inference of a user's waist movement is used to simulate movement in a games console and for the purposes of simulation.

The fourth point, there is no specific disclosure or suggestion of feedback on the correspondence between the detected or in the case of the Wii balance board inferred user's movement.

The fourth point, there is no specific feedback on the correspondence between the measured movement and reference

data in the common general knowledge or Wii balance board. The fifth point, which comes back to the point about the characterising feature of the inventive concept, which is that the combination of measured movement of a user's waist, detected movement of a user's waist by measuring acceleration of the user's waist and in conjunction with determination of the time period between a minima and maxima such that a hoop movement can be identified is not suggested or disclosed in the common general knowledge, or the Wii balance board as asserted by the examiner.

I find that those five differences are (a) clearly directed towards the provision of a means for identifying, a means for detecting repetitive movement of the user's waist as if mimicking the movement of the hoop, and are not obvious because there is no teaching or suggestion that has been put forward in respect of the common general knowledge or the use of a Wii balance board, or indeed a Smartphone and accelerometer that would suggest that is an obvious solution to the problem of how to measure movement of a user's waist and therefore provide a method of training a user to move a hoop around the waist, which I agree is fundamental to the inventive concept defined by the claim.

In respect of the second strand of the objection put forward by the examiner, which rests on prior art document WO2009/013679, I again find that the examiner's objection is

difficult to sustain because, as per the argument put forward by the applicant, there is no comparison -- I am going to refer to the prior art document hereafter as 679 -- there is no comparison of the measurement of acceleration with reference data independently stored previously from other users but rather the application is clearly directed towards the device having template data stored previously by a user who trains the device in accordance with the template so as to be able to use it in accordance with that template. The purpose of the invention as defined by WO2009/013679 is to ensure a user continues to use the device in accordance with the template and does not deviate beyond thresholds from using the device consistent with that template. That is a different purpose than the current invention set out to achieve.

Secondly, in WO2009/013679 there is no disclosure of measuring repetitive movement of a user's waist mimicking a hoop movement. Whilst I acknowledge that WO2009/013679 does disclose an embodiment where the device can be attached to the user's waist and can therefore measure the movement between two extremes of position of a user's waist, such as illustrated in Fig. 3, there is no suggestion that the movement so detected is repetitive movement as if mimicking the movement of a hoop and in fact again I find the patent teaches away from the purpose of detecting repetitive movement of a user's waist as if mimicking the movement of a hoop because the patent is

directed towards detecting, measuring and detecting movement between two extremes of position.

Even if that done with accelerometers, as the examiner alleges it may be done, the purpose of the use of those accelerometers is to determine extremes of position such that the device can be used between two positional extremes in a three dimensional space. It is, therefore, my understanding that that application WO2009/013679 is specifically teaching the requirement to measure, if using accelerometers, acceleration data within three dimensions in order to put that application into effect. In contrast, the current application specifically measures acceleration data, specifically detects repetitive movement as the user's waist as if mimicking the movement of a hoop, specifically measures G-forces, specifically compares data from only two axes of movement, X and Z axes consistent with movement of a user's waist and the horizontal plane, specifically compares that measured data with reference data independently stored previously from users and provides feedback to the user indicating a degree of correspondence between the measured data and the reference data for the purpose of, as the applicant has identified the inventive concept, a method of training a user to move a hoop around the waist.

Again, I come back to the point about the key characteristic of the invention being, firstly, detecting

repetitive movement of a user's waist as if mimicking the movement of a hoop and, secondly, determining the time period between minima and maxima of acceleration, because those two things together are key to simulating the movement or detecting the simulated movement of a hoop around a user's waist, which is fundamental to the inventive concept.

As I have said, I interpret WO2009/013679 to teach away from that concept, firstly, because it measures extremes of movement in three dimensions, secondly, because it compares measured data with template data, and I would observe, thirdly, that Fig. 3, although it does specifically disclose that the device can be attached to a user's waist and can therefore be used to measure extremes of movement of a user's waist, Fig. 3, to my mind, in representing a figure with their feet apart as though in a walking or lunging movement, again does not suggest to me that the user would be using the device disclosed in WO2009/013679 to mimic the movement of a hoop.

In summarising the differences between the inventive concept as defined by the claims to the current invention, and the two objections which have been set out by the examiner, firstly, in respect of the common general knowledge, including the Wii balance board, Wii controller, and a Smartphone, and with reference to WO2009/013679, I would observe that whilst I have a great deal of sympathy for the examiner's objection as he has very clearly and comprehensively set it out, and has taken the time to

explain why each of those different steps that I have emphasised would be obvious to do in isolation, it is my opinion that, although the examiner has shown that with a sufficient understanding of physics and mathematics, and of devices which did exist within the prior art at the time of filing of the application, he has demonstrated that those modifications are technically feasible. However, I am not persuaded that those modifications are therefore obvious.

To summarise, then, the differences that I have identified over and above the common general knowledge and the Wii balance board games controller and Smartphone, on the one hand, and WO2009/013679 on the other, are that the current application detects the movement of a user's waist, it detects movement of a user's waist as though mimicking a hoop movement, it does so by measuring acceleration and uses data only in the X and Z horizontal planes; it compares that measured data with independently stored reference data from users, and provides feedback to a user in respect of the degree of correspondence between the measured data and the reference data, and this is the key element of the inventive concept, to my mind, it determines a time period between minima and maxima of acceleration and compares those with a target time period. In so doing that particular combination of features is necessary to determine movement of a user's waist characteristic of mimicking the movement of a hoop, and that is not obvious

given the starting point either of the common general knowledge, including the Wii balance board, hand-held Wii controller, and a Smartphone, nor is it obvious given the starting point of WO2009/013679.

In respect of the final objection under section 14(5)(b), I am reminded again of the importance of construing the claim following guidance in Kirin-Amgen[ii], namely, to ensure that my construction of the claim is purposive, having in mind the purpose of the invention and avoiding a strict literal interpretation of the terms of the claim.

I shall refer to the <pre-hearing report> in this respect, so the objection under section 14(5)(b) relates principally to use of the word "horizontal" preferring a definition of horizontal as parallel or horizontal to the earth's surface and raising an objection of clarity, therefore, over the meaning of horizontal and consequently of the X and Z axes within the claim, claiming that knowledge of the orientation and the posture of the user would also be necessary.

However, I think given that the purpose of the invention as clearly set out by the description and as essentially defined by the claims is to detect repetitive movement of the user's waist as if mimicking the movement of a hoop and in so doing measure acceleration along at least horizontal and Z axis, and then referring to the last paragraph of the claim,

where the values associated with the X axis represent forwards and backwards movement of the user's hips and the values associated with the Z axis represent the lateral movement of the user's hips, I find that to be clear such that the claim can be construed as to clearly define the inventive concept having in mind the purpose of the invention and it is clearly supported by the description which is entirely consistent with that construction.

The decision will explain that any appeal can be filed within 28 days and I will end my oral decision there.

Now, I hope Mr. Cooper, that that will transcribe with a bit of tidying up so as to be clear and comprehensive. Do you have any comments in respect of my summing up/decision?

MR. COOPER: No, we are very happy with that. Thank you. Thank you for providing an oral decision.

THE HEARING OFFICER: Thank you.

I hope it is clear what the decision is.

I know what I should have said is that - this will also form part of the transcript then - is that I will remit the application to the examiner for him to outline objections relating to where the description needs to be amended to be consistent with the claims. When you have filed amendments, to bring the description into line with the claims, and the examiner is satisfied that the application is otherwise in order for grant, then it may be granted. I hope we can

achieve that within the time scale, which is defined by the compliance date ending on 3rd December.

Sorry, I should be absolutely clear, my assessment is that the claims as they stand are acceptable and it is the description that needs to be amended to be brought in line with the claims. I shall remit the application to the examiner for his report to enable you to file amendments to achieve that. Okay.

MR. COOPER: Okay.

THE HEARING OFFICER: Right. I will end the oral decision there.

It will be issued in due course but for the purposes of this hearing, the decision is taken, the points under section 1(1)(b) and 14(5)(b) are overcome, and the descriptions needs to be brought in line with the claims consistent with paragraph 12 of the pre-hearing report, which means that you should hear from the examiner in the next few days in the form of an examination report and I hope that between the examiner and the applicant the application can be brought in order for grant by the compliance period. Okay.

MR. COOPER: Okay. Thank you.

THE HEARING OFFICER: Okay. I will end the hearing there. If you have any queries, particularly regarding follow-up actions or what happens next, do get in touch with <Litigation> and, if necessary, I can obviously provide any advice as well; otherwise, hopefully we have a clear path to proceed.

MR. COOPER: Yes, I am grateful. Thank you very much.

THE HEARING OFFICER: All right. Thank you very much. Have a good afternoon.

MR. COOPER: Thank you.

THE HEARING OFFICER: Cheers. Bye.

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[i] Pozzoli SPA v BDMO SA [2007] EWCA Civ 588

[ii] Kirin-Amgen Inc v Hoechst Marion Roussel Ltd 2005 RPC 9