



28 January 2012

PATENTS ACT 1977

APPLICANT

William Kostuj

ISSUE

Whether patent application number
GB1001747.3 complies with section 1(2)

C L Davies

DECISION

Introduction

- 1 International patent application PCT/IB2008/052752 entitled "Method Of Forming A Golf Swing And Equipment" was filed in the name of William Kostuj (the "applicant") on 9th July 2008 (Priority Date: 9th July 2007). The international application was published by WIPO as WO2009/007918 on 15th January 2009, entered the UK national phase as GB1001747.3 and was re-published as GB2464055 on 7th April 2010.
- 2 During the course of substantive examination and despite several rounds of correspondence, the applicant has been unable to convince the examiner that the application is patentable. Consequently, the matter has come before me to decide. As requested by the applicant, my decision will be based on the papers on file.
- 3 In a pre-hearing report dated 6th October 2011, the examiner set out the main outstanding issues namely industrial application, patentability, sufficiency, added matter, novelty and inventive step. As Hearing Officer, I allowed the applicant time to file further submissions which I informed him I would take into account when reaching my decision. The applicant subsequently filed amendments to the claims and description, together with arguments in a letter dated 21 November 2011. My decision is based on those amended claims, given that the applicant in his letter indicated that he had submitted amending to the present application (page 5 lines 24-25).

The application

- 4 The application relates to the field of golf swing. More specifically, the present invention relates to first developing a limb-only golf grip and golf swing without

holding a golf club and once a consistent grip and swing have been developed a golf club is fitted to that.

- 5 The use of multiple and variable pieces of equipment and different swing styles (e.g. chipping, putting) for the same activity, is one of golf's unique features. The applicant alleges that this is why a reference or base golf swing must be learned without using any golf clubs or other external devices or influences. This, he further alleges results in the most consistent, repeatable, and reliable swing motion possible without any external influences being present to affect the swing.
- 6 A base swing is unique to each individual and once established it forms the reference action from which further improvements can be made. The base swing can be analysed using video or computing means.
- 7 The description mentions and describes a plurality of hand gripping styles: The Vardon grip, baseball style golf grip, overlapping grip, interlocking golf gripping style. Once a base swing and grip has been established, it is purported that it can then be used to fit/make golfing equipment that is appropriate to the individual's personal swing and grip style.

The claims

- 8 My decision is based on the claim set filed by the applicant with his letter dated 21 November 2011.
- 9 There are 21 claims in total (claims 1-70 have been cancelled and so the claim numbering starts with number 71). There are three independent claims 71, 84 and 91 which read as follows:

71. A method of more efficiently establishing a golfer's current base golf grip and swing through which the golfer's performance can be more efficiently changed or improved comprising:

forming an overlapping, interlocking, or other preferred golf club gripping structure with the hands of a golfer in a manner in which the hand formation used when gripping a golf club is adjusted as appropriate for the purpose of effectively substituting for the presence of a golf club when no golf club is present, thereby eliminating any effects of any number of poorly fitted or poorly made golf clubs on the golfer's golf grip or swing and resulting in truer and more consistent golf swings made by the golfer: and

having the golfer perform the golfer's current golf swing using said formed golf grip, said golf grip and swing becoming the golfer's current base golf grip and swing, whereby said base golf grip and swing are analyzed against subsequent golf grips formed and golf swings made by the golfer with or without golf clubs or comparably existing reference information regarding a different golfer or entity to be emulated in order to change or improve the golfer's golf grip, swing, or the fit of the golfer's equipment in a more structurally efficient manner.

84. A method of determining a performer's base performance of a determined activity that utilizes equipment during performing, said base performance used as

a basis for more efficiently changing or improving said base performance or fitting said equipment to said base performance comprising:

removing all equipment used in the performance of a determined activity from a performer of said activity; in a manner such that the limb or limbs of the body of the performer involved in the use of said equipment are structurally adjusted as appropriate for the purpose of effectively substituting for the presence of said equipment when no said equipment is present, thereby eliminating any effects of any number of poorly fitted, poorly made, or inconsistent pieces of said equipment on the performer's performance of said determined activity and resulting in truer and more consistent performances made by the performer; and

having the performer make a performance of said determined activity under said conditions of having all equipment removed and any appropriate limb adjustments made in order to effectively substitute for said removed equipment, said performance becoming the performer's current base performance, whereby said performance is analyzed against subsequent performances made by the performer with or without said equipment or comparably existing reference information regarding a different performer or entity to be emulated in order to change or improve the performer's performance or the fit of the performer's equipment used in said determined activity in a more structurally efficient manner.

91. A method of fitting a golf equipment or golf club specification measurement to a golfer's base golf grip or swing, comprising:

exposing a golfer's base grip and swing, said base golf grip and swing comprising the forming of an overlapping, interlocking, or other preferred golf club gripping structure with the hands of the golfer in a manner in which the hand formation used when gripping a golf club is adjusted as appropriate and applied to substitute for the presence of a golf club when no golf club is present, thereby eliminating any effects of any number of poorly fitted or poorly made golf clubs on the golfer's golf grip or swing and resulting in truer and more consistent golf swings made by the golfer, and at least one golf swing made by the golfer using said formed golf grip; and

fitting a golf equipment or golf club specification measurement to the golfer's base golf grip or swing in a manner such that the best fit of said equipment or golf club specification measurement is achieved when the golfer's base golf grip or swing is best duplicated when using said golf equipment or golf club specification.

- 10 I am mindful that the amended claim set has not been examined due to them being filed late in the process.

Issue to be decided

- 11 Having read the application and claims, and the correspondence between the applicant and the examiner, I will now proceed by focusing on what I believe to be the main issues before me to decide, namely whether claims 71 and 91 satisfy section 1(2) of the Patents Act 1977 (the Act) and whether claim 84 satisfies section 14(3) (sufficiency) of the Act.

- 12 I will consider first, section 14(3) in respect of claim 84 and then move on to consider section 1(2).
- 13 Should I find in the applicant's favour, then I will remit the application to the examiner for further processing.

The law and its interpretation

Sufficiency

- 14 Section 14(3) of the Patents Act 1977 states:

"The specification of an application shall disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the art."

Patentability

- 15 The relevant parts of section 1(2) read as follows:

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.

- 16 Current IPO examination practice is to use the structured approach set out by the Court of Appeal in its judgment in *Aerotel/Macrossan*¹ for deciding whether an invention is patentable. In this case, the court reviewed the case law on the interpretation of section 1(2) and approved a four-step test for the assessment of patentability, namely:

- 1) Properly construe the claim;
- 2) Identify the actual contribution;
- 3) Ask whether it falls solely within the excluded matter;

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

4) Check whether the contribution is actually technical in nature.

- 17 More recently, the Court of Appeal in the case of *Symbian*² confirmed that this structured approach is one means of answering the question of whether the invention reveals a technical contribution to the state of the art. In other words, *Symbian* confirmed that the four-step test is equivalent to the prior case law test of ‘technical contribution’, as per *Merrill Lynch, Gale and Fujitsu*.
- 18 Operation of this test is explained in paragraphs 40-48 of the judgment. Paragraph 43 confirms that identification of the contribution is essentially a matter of determining what it is that the inventor has really added to human knowledge and involves looking at the substance of the invention claimed, rather than the form of the claim. Paragraph 46 explains that the fourth step of checking whether the contribution is technical may not be necessary because the third step – asking whether the contribution is solely of excluded matter- should have covered that point.

Sufficiency: section 14(3): Claim 84

- 19 As far as I can determine from considering the specification as originally filed, the rather general paragraph 5 on page 2 provides the only support for claim 84. However, no examples of what might constitute “many other sporting (and non-sporting) activities” are given and critically, no examples in the form of “enabling disclosures” other than golf, are provided. On this basis, I consider claim 84 not only to be broad and speculative in scope but also insufficient insofar as it does not satisfy the requirements of section 14(3) of the Act. I will not go on to consider this claim any further but will take this opportunity to point out that the following objections to patentability would equally apply to claim 84.

Patentability- Application of the Aerotel test

First step: Properly construe the claims

- 20 The first step in the *Aerotel/Macrossan* test requires me to construe the claims. This is not straightforward since the claims contain clarity issues. For example, claim 71 contains several phrases which are indeterminate in scope: “more efficiently” (line 1), “poorly fitted or poorly made” (8), ‘truer and more consistent’ (line 9), ‘structurally efficient manner’ (line 17).
- 21 Establishing a base golf grip and swing in the absence of golfing equipment is a central theme of the application. This, as the examiner has pointed out, is problematic. What exactly constitutes a base grip & swing? This appears to be a stage in the learning process that a golfer ‘feels’ certain progress or level of skill has been achieved in their swing. A feeling or a sporting skill level is not something that can be defined in an objective, technical sense. It lies in the field of judgements made by those skilled in the (sporting) art or in comparing oneself with other players. Regarding the term ‘swing feel’ paragraphs 56 and 57 of the original description support at least in part the subjective nature of this term:

² [2009] RPC 1

“The present invention allows such an authoritative definition of 'swing feel' to be formulated. In referring back to Figures 6 through 11 if needed, the definition of 'swing feel' in golf, as newly and better defined here, distinctly becomes 'the feel obtained anywhere or anytime in the course of golf swing performance using only the limbs of the body to swing with, absent any golf clubs or golf club substitutes, and also eliminating all other extraneous elements deemed potentially influential respecting golf swing performance.' 'Golf club substitute' is defined here as any extraneous device or circumstance used other than only the limbs of the body in the course of swinging and which may affect the performance of said swinging.”

“Despite the expression's greatly improved definition here, 'swing feel' may always retain a 'subjective' component to it that might depend on unscientific human feelings. Therefore, other means may be used to help assess swinging performance as well. These might include but not be limited to the watchful eye of a qualified entity regarding swing performance and/or equipment fitting, video comparisons against preexisting swing style movements and/or positions, and/or computer- implemented aids for golf swing and golf club fitting analysis”

- 22 Whilst I recognise there are issues regarding clarity/scope of the claims before me, by taking into account the original disclosure, the applicant's response of 21 November 2011 and other correspondence on file, I believe that it is not too onerous on me to construe the claims.
- 23 Thus with the above in mind, I have placed the following interpretation on independent claims 71 and 91: both have as their central theme a 'limb-only established swing': 'a method of producing a golf swing, without the use of a golf club, by forming a limb-only golf grip and performing a limb-only golf swing'. In claim 71 this "limb-only" established swing is used as a reference for further swing improvements. Claim 91 is directed to a method for fitting golf equipment to the limb-only established swing.

Second step: Identify the actual contribution

- 24 The applicant in his letter dated 21 November 2011, has given an indication as to what he perceives to be the contribution:

“The present invention is about more efficiently improving a golfer's golf swing and/or the fit of the golfer's golf equipment. What makes either of these things possible is to first determine a base golf swing for the golfer that is made by adjusting as appropriate the golfer's hand positions, this allowing the golfer's current golf swing to be made without any golf club in hand. This base swing is then used as reference with which to make the improvements stated above. To that end, and relatively speaking, only the first third of the application deals with how to make such a beginning reference swing. The second third deals with how to use that base swing to improve the golfer's swing more efficiently, with the final third addressing how to use that base swing to improve the fit of the golfer's equipment more efficiently.” (page 1, 3rd paragraph et seq)

“Once a golfer takes the appropriate limb-only golf grip, he or she simply makes the best golf swing he or she is able to using that golf grip given the talent level of

the golfer at the given time” (page 2, 2nd paragraph)

“It is the recording of that base golf swing (for reference against future golf swings made either with or without golf clubs) that is done through means ranging from a video or computer recording of that base golf swing to the way that swing feels to the golfer, a very viable parameter when it comes to gauging golf swing effectiveness or efficiency” (page 2, 3rd paragraph)

25 In the prehearing report dated 6 October 2011, the examiner set out the contribution as:

“What the inventor has added to the stock of human knowledge is clearly not the apparatus. The apparatus that may be utilised in the present application is merely a conventional golf swing analyzer/monitor, computer or conventional golf club.

“The actual (or alleged) contribution is considered to be “a method of producing a golf swing comprising, without the use of a golf club, forming a limb-only golf grip and performing a limb-only golf swing, wherein the swing may be analyzed to determine the golfer’s base swing”.

26 Whilst I appreciate the examiner has analysed a different claim set, I nevertheless recognise that in essence, the theme has not changed.

27 The applicant accepts that the prior art discloses limb-only swing in the absence of golfing equipment. However, the applicant is seeking to distinguish the present invention from this “imaginary” golfing and has argued that the present invention is different because it establishes a structured limb-only approach i.e. the invention is systematic and all encompassing as compared to the alleged “nonessential afterthought” of the prior art:

“Whereas in the past one’s golf grip and swing have been taught/learned exclusively with a golf club in hand and the use of swinging without a golf club was applied as nonessential afterthought and merely as an exercise to practice and reference against the golf grip and swing that was learned with a golf club in hand, the present invention does exactly the opposite” (Page 5, 3rd paragraph, applicant’s letter 24th May 2011)

“The present invention directs that one’s grip and swing be built from the ground up in a very structured limb-only fashion, that this concept is the whole reason that the traditional golf grip has developed into what it is, that this element has never been anticipated before, and that this should be taken advantage of for swing teaching, learning, and/or clubfitting.” (Paragraph bridging pages 5 & 6 of applicant’s letter 24th May 2011)

28 In determining the contribution, I have given careful thought to both the applicant and examiner’s views in respect of what constitutes the contribution and consideration according to *Aerotel* (paragraph 43) of what the inventor has really added to human knowledge.

29 I accept the point made by the applicant that the limb-only swing perfected

without any golf equipment is the core concept/foundation around which other activities are structured eg. improvements, fitting etc. I must regard the equipment mentioned in the specification (golf swing analyzer/monitor, computer or golf club) as being conventional and thus not forming part of the contribution.

- 30 In my opinion therefore, I believe the contribution resides in: “a method of producing a golf swing comprising, without the use of a golf club, forming a limb-only golf grip and performing a limb-only golf swing, using that as reference for further improvements, the limb-only established swing being used for the fitting or making of golfing equipment”.

Third step: Ask whether the contribution falls solely within excluded matter

- 31 The examiner has maintained his objection to the invention being excluded as “a scheme, rule or method for performing a mental act, playing a game or doing business” in accordance with section 1(2)(c). Further, the examiner has maintained his objection that the contribution may be excluded from patentability as it may fall within the scope of “**among other things**” set out in Section 1(2) of the Act.

- 32 As mentioned earlier, the current claim set has not been examined. I am mindful that the examiner based his views on a previous claim set but having now considered both sets of claims, I am satisfied that the nature of the fundamental objection to excluded matter still stands. I will now consider the specific exclusions of section 1(2)(c), and also whether the invention is caught by the phrase “among other things” set out in Section 1(2).

A scheme, rule or method for performing a mental act, playing a game or doing business

Playing a Game:

- 33 It is clear to me that the contribution made by the invention is no more than a scheme for training individuals to improve their golfing skills.
- 34 The limb-only swing -establishing a particular gripping action using the hands and establishing a limb-only swing action in the absence of golfing club/equipment- at the heart of the contribution is not technical and can never be technical, in the same way that performing a ‘mime’ (a pattern of activity) is not technical and can never be technical. In my opinion, the contribution is excluded from patentability as a method for playing a game, because it resides in the field of playing a game and has nothing to do with a field of technology.

Mental Act:

- 35 I believe also that the contribution I have identified is essentially caught by the mental act exclusion. The fact that the ‘mime’ or limb-only action here is in the context of a sporting activity (golf), does not take it out of the mental act exclusion. The learning process can only work because of the strong mental component that repetition produces and this mental aspect is alluded to in the

original description:

“In further elaborating about 'swing feel,' which can be a very consistent, repeatable, and easily memorizable activity when performed in accordance with the definition stated above, golfers could be very familiar with the positions of every part of their bodies at any point during their unaffected swings, as well as the overall speed (tempo) and coordination of moving body parts in a specific order (timing) of their swings. 'Swing feel' applies to all types of golf swings made, from the fullest, hardest of golf swings down to the smallest, most subtle of chipping or putting strokes. Such 'swing feel' may be utilized alone in this step and communicated to the clubfitter. Despite improved technology analysis devices, subtle differences in 'swing feel' may be detectable by the human brain even before, as an example, a complex computer reveals any swing change(s)...” (paragraph 62)

35. However, I recognise that it would not be possible to extend the mental act exclusion if hardware (conventional golf swing analyzer/monitor, computer) was included as part of the contribution. It would seem therefore that the mental act exclusion in respect of claim 71 might be overcome by for example, incorporating the computing/analyzing means mentioned in claims 75 and 82 at least. Even in such an event however, such a contribution would be caught by one of the other exclusions discussed herein.

Method of doing Business:

- 36 The use of the limb-only action as a reference for further improvements and/or fitting/making of golfing equipment does not take it out of the exclusion. The process of fitting and making of golf equipment such as golf clubs requires the judgment of a skilled person in order to meet the needs of an individual. This activity would appear to lie in the business aspects of sport and would thus appear to be caught by the business method exclusion.

- 37 The applicant has pointed out his letter dated 21 November 2011 that:

“... my contention is that a tradition golf grip can be considered a very unique article or entity in and of itself, so much so that the mere mention of an overlapping or interlocking gripping style and people know that the game of golf is being referred to even if the game is not initially mentioned. The present invention provides a new patentable use for this article by changing it into a slightly different physical state in such a way that the article can effectively substitute for the existence of a golf club (always a perfectly fitting golf club) for the purpose of more efficiently improving a golfer's swing and/or the fit of the golfer's equipment” (page 6, 2nd paragraph)

- 38 Defining a gripping style as being an article/entity and arguing that it can substitute for the existence of a golf club doesn't help. The contribution is excluded as a matter of substance and cannot be rescued by semantics.

- 39 The specification mentions the use of a computer- implemented process and/or video analysis and/or golf- specific analyzer to aid in the fitting/making of the at

least one golf club and/or other piece of golf equipment. These are standard, conventional equipment and cannot rescue the invention from exclusion.

Among other things

- 40 In the event that I am wrong and the contribution is not caught by the exclusions of section 1(2)(c) as discussed above for failing to fall squarely within that specific list, I will give consideration as to whether the contribution would be caught under the phrase “among other things” in section 1(2).
- 41 The structured process of establishing a limb-only swing, and using that as a basis for further improvements and/or fitting or making of sporting equipment such as golfing equipment is not, in my opinion, suitable subject matter for patent protection. In so far as it could be argued that this does not fall squarely within any one or combination of the specific excluded matters discussed earlier, I consider that the invention is very closely analogous to a scheme, rule or method of performing a mental act, playing a game or doing business and so would be caught under the phrase “among other things” in section 1(2).

Step four: Check whether the contribution is actually technical in nature

- 42 This has already been considered in step 3 of the Aerotel/Macrossan test. The contribution is not technical in nature and does not belong to a field of technology.

Summary

- 43 Taking into full consideration all the correspondence on file, the amended claims and specification, I find the contribution not to be technical in nature and simply consisting only of excluded subject matter which is no more than a scheme, rule or method for performing a mental act, playing a game or doing business. I find that the contribution is also caught under the phrase “among other things” in section 1(2).

Novelty, Inventive Step, Clarity, Added Matter

- 44 I will not give further consideration to these other objections raised by the examiner in his pre-hearing letter dated 6th October 2011, given that I have found claims 71, 91 to be non-patentable and claim 84 to lack sufficiency.

Industrial Application

- 45 I note the examiner raised an objection to industrial application in his prehearing letter of 6 October 2011. Whilst I do not intend to go into this in any great detail, I believe the current invention is not one that can be made or used in any kind of industry and thus lacks industrial application.

Conclusion

- 46 After taking into account all of the papers on file, I find that independent claims 71

and 91 before me define non-patentable inventions which are excluded under Section 1(2). I find claim 84 to lack sufficiency. I can see nothing in the remaining claims or the rest of the specification that could form the basis of a valid claim. I therefore refuse the application under section 18(3) for failing to comply with section 1(2) and section 14(3).

Appeal

- 47 Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

C L Davies

Deputy Director acting for the Comptroller