A Critical Analysis of the Arguments For and Against the Granting of Patent Rights Over Sporting Apparatus and Sports Moves

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Critically analyse the arguments for and against the granting of patent rights over sporting apparatus and sports moves. Illustrate your discussion with reference to relevant case law and legislation.

I Introduction:

A patent is a monopoly right granted for a period of up to 20 years[1] to the proprietor or inventor[2] (the ‘patentee’) of an invention if, subject to certain limitations, it is new and industrially applicable. The patent entitles the patentee to exclusive use through manufacturing or licensing of their invention. Thus a valid patent aims to prevent others from producing a patented product or using a patented process without the patentee’s permission. This protection also extends to cases where the infringer does so without intention, for example, where they have found the product or process independently.

Few would object to sports apparatus receiving patent protection, possibly because apparatus is tangible. Offering a monopoly right to the inventor of a revolutionary new golf shoe or hockey stick is already accepted practice. However, for some, it is the patenting of sports moves which is a step too far. What was previously simmering below the surface finally erupted into a maelstrom which truly rocked the patent boat when Kunstadt’s[3] article on patenting sports moves was first published. Commentators have been divided ever since. One thing is for sure, sport is big business, and as Kunstadt said ‘big business demands … protection’. [4] Where we draw the line, and how the Patents Act assists us in this endeavour poses many interesting questions.
II Legislative Framework:

Rather than arising automatically, as in the case of copyright protection, a patent must be applied for. Patent applicants go through a series of formal legal steps and applications are subject to rigorous scrutiny prior to grant. In the UK, the Patents Act 1977 (Patents Act) sets out these steps thus providing a framework upon which to determine the patentability of inventive intellectual property. To date, the UK has applied a narrow interpretation to the Patents Act and has not, as yet, patented a sports move. In contrast, the US Patent System\[5\] is much wider in scope, enabling applicants to obtain patents for inventions that would not qualify as such within the UK.

In order to secure the grant of a patent in the UK the invention must fulfil the requirements of Sections 1-4 of the Patents Act, namely it should be new,\[6\] consist of an inventive step,\[7\] be capable of industrial application\[8\] and not be excluded. A patent can be excluded under subsections (2) and (3) or 4A of the Patents Act. The initial steps to apply for a patent are straightforward. Legal issues arise when we look closer at ss. 1 and 2 of the Patents Act. It is interesting to see that the term ‘invention’ has not been defined. As a result these first two sections form the basis of each application. Patent attorneys therefore have to use their skill and judgement when drafting patents to ensure that their terms comply with these first two sections. Case law has developed as a means to assist with the interpretation of applications. The UK courts have taken a narrow view in determining what shall constitute an invention for the purposes of granting a patent. However the position is quite different in the US where we have seen patents granted for such things as putting methods and football line ups.

Novelty

To be considered ‘new’ an invention must not form part of the state of the art.\[9\] This is a two-part test;\[10\] firstly has there been a disclosure, and secondly is the disclosure enough for the invention to be anticipated. Because disclosure can ruin novelty, this hurdle would directly impact
upon sportspeople who would be unable to practice or refine their move in front of the rest of your team, or their coach.

Inventive Step

The invention must also involve an inventive step, and shall be taken to do so if it is not obvious to a person skilled in the art. UK courts rely on the four stage test in *Windsurfing* to assist them in this. The key part of that test is whether the step would have been obvious to another sportsperson. Given the competitive nature of sports, it is probable that at least one other sportsperson could have come up with the move. Further, it would be almost impossible to ascertain if it had already been ‘invented’ by someone. A good example of this is the Fosbury flop which will be discussed in detail later.

Capable of Industrial Application

The Patents Act uses the concept of industrial application as a means of preventing purely intellectual inventions from gaining monopoly protection. This concept is widely defined, thus, if an invention can be made or used in any kind of industry, then it could be granted a patent. This section of the Act is about ensuring that inventions are tangible, not abstract, and it is at this point that a sports move is most likely to fail. A sports move is not something which could be made in an industrial setting.

What is excluded?

The Patents Act also sets out a non-exhaustive list of ‘things’ which it declares to be incapable of being an invention. Of particular relevance is s.1(2)(c) which states that ‘a scheme, rule or method for performing a mental act, playing a game …’ are not inventions for the purposes of this Act. In reviewing this section it would be difficult to see a time when sports moves could be patented within the United Kingdom. A sports move would seem to be a method of playing a game. Further analysis of the particular words used in this section of the Act is required to gain a deeper
understanding of how the law in this area could develop. Viewing the words individually, giving them their ordinary dictionary meaning, we see that whilst each of the words is distinct and different, they are none-the-less connected. Using their ordinary definitions found in the Oxford English Dictionary[14]

1. “method” is defined as “a way of doing anything”,
2. “rule” is defined as “a regulation determining the methods or course of a game or the like”
3. “scheme” has several different definitions, many of which are partially or wholly appropriate. In this particular aspect, it can be seen to be a collection of methods and rules by which a game is played.

Therefore, in this sense we see that rules are the parameters by which the game is played, methods are the mechanics of how the game is played, and scheme can be seen to be the sum of the whole. For example, three strikes and you are out in baseball; this is the rule. Detailed information about how to hold and then throw the ball is the method. Combined with other rules and methods, these become a scheme for the game of baseball. If this assumption is correct then sports moves could not be granted patent protection as the UK law currently stands.

To understand how the law is moving towards protecting sporting moves we should consider the US system of patents[15] where patent law has been very widely interpreted. Here we have seen the first patents granted in respect of sports moves for example the Method of Putting.[16]

III Arguments Against Granting Patent Rights

Those who argue that sports moves should be patented to protect the sportsperson’s brand identity for use as a marketing tool should be looking at trademarks, rather than patents. Their argument is based upon a connection which is drawn between the sportsperson and their move, which can be commercially exploited. Consequently, it is more akin to a trademark and should more appropriately be applied for as a motion trademark. This was the situation with Jonny Wilkinson and his ‘cradle’ move. The UK Patent Office agreed with this. When approached for their opinion on
whether or not he could protect the move, the Patent Office said that “although unusual a gesture had already been used in this way as a motion mark by the Derbyshire Building Society.”[17]

Costs and time are also important considerations, especially in a sporting environment due to the inequality of earning potential between professional and amateur sportspeople. The costs involved in applying for a patent may be so prohibitive that there would be little or no incentive for sportspeople to seek patent protection. Especially when combined with the difficulties of enforcing your right. This would be especially so for amateur sportspeople.

In addition, the requirement of novelty is not met once an invention is made available to the public. This is crucially important for sportspeople who may privately work on a new move, for example a means of holding a cricket ball so that its spin is increased, but without trying this out on the sporting field they do not know for certain how well it will work. Similarly in team sports, a new move may only be able to be practised with the assistance of team members in training or in competition with other sportspeople.[18]

It would not be in the public interest to permit sports people to patent moves, “the public should not be prevented from doing anything which is an obvious extension … of what [is] already known”. [19] The human body does not have an infinite number of moves; each joint has a limited range. Consequently, all moves and variations thereof must already be in the public domain. The pace of innovation in human terms is evolutionary and takes thousands of years. This is in contrast to advances in technology. A good example of fast paced developments is that of computer technology. Further, insignificant variations should not be able to lead to the grant of a patent for sports move; “if every slight difference in the application of a well-known thing was held to constitute a ground for a patent’ it would lead to an unjustifiable interference with trade” [20] and equally the same could be said of sport. Sports moves also have the potential to stifle competition if patented, which is not in the public interest; no-one wants to see the same person win all the time. In addition, it is against the original spirit of patent protection whereby patents were granted to encourage innovation and competition.
Smith[21] argues that there are other more appropriate methods of protecting the financial prosperity of sportspeople. In particular he points out that contract law offers much more flexibility for reward and greater protection should a sportsperson invent a sports move. This argument is flawed in so far as it does not offer protection to amateur sportspeople who are outside of any contractual agreement.

Enforceability poses problems. Let us consider the patented method of putting. Miller would not know if his patented method were being used unlawfully. He cannot police the environment in which the patent exists on geographical grounds if nothing else. We could suggest ways to assist him in managing this, such as granting licenses to each golf course, similar to performing rights licenses for playing music in shops and bars. But again, he would still require someone to police it. This role would ultimately fall to grounds men on golf courses or referees at sports grounds. These additional duties would require training and finance, all of which begs the funding question. It is unlikely that the owner of the patent would want to go to this expense. Furthermore, unless the method is used in a televised or public match with prize money at stake, the unauthorised use of the method will likely go unchallenged. If the unauthorised use were challenged the costs of litigation are likely to be such that this alone would put off even the hardiest litigator. There would also be technical difficulties in providing evidence of adequate quality. For example, video footage of the player’s movements and hand grips would have to be excellent, and depending upon the subtlety of the move in question witness evidence would have to be quite specific so as to hold up under examination. In the event that the patentee was successful, there are further difficulties in assessing the correct measure of damages.[22]

Proponents of patent protection argue that granting patents encourages innovation and that sportspeople would be more inclined to come up with new moves if they were rewarded in this way. This argument does not hold up. Sportspeople are competitive by nature and are continually striving to be the best in their field. Further incentive is not required.
Harmonization is a compelling argument in favour of sports moves. The US have already begun to offer patent protection for sports moves, and as co-members of TRIPS[23], it could be argued that we should offer that protection in the UK, especially as harmonization is already occurring within Europe as a result of conventions, treaties and WIPO.[24] Additionally, patents are territorial rights which must be applied for in each of the territories where the owner seeks to protect their invention. Sports have worldwide appeal, a sportsperson will have to ensure that he obtains a patent not only for each country in which he may play but also in each country where his move may be seen on various media and copied. The effect of the European Patent Convention (EPC) also raises interesting issues in terms of enforcement and interpretation. The EPC’s role is purely in the granting of patents not enforcement, this can result in a patent which has been granted in two separate member states being interpreted differently in each one. This also has wide reaching implications for sports moves.

Sports Moves

The main proponent of granting IP rights to sports moves is Kunstadt.[25] However, even his argument is limited in respect of granting patent rights and he concentrates mostly on copyright and trademark protection. In terms of patent protection, his argument is mainly one of economics. He argues that sportspeople and their moves are part of the “fuel that drives the sporting economy” and as such they should reap some of the rewards. Kukkonen suggests that although the movement of a human body is natural, by refining it to create a useful process [such as a faster ball pitch][26] then it should rightly be caught by patent protection.[27]

The majority of arguments for granting intellectual property protection to sports moves focus primarily upon economic terms. The argument is that a sportspersons career is generally short, compared to regular careers in commerce and industry, and as such they should be entitled to ensure that their years in retirement are financially secure. This argument carries much less weight when you
consider that only the very top sportspeople earn large sums from sponsorship, advertising and merchandising. Many sportspeople, and especially amateurs, earn little or nothing other than prize money from their sporting endeavours and achievements. Therefore it cannot be equitable to develop intellectual property law in a way that offers higher earning potential to the already financially successful sporting elite. Combined with this inequality is the 20 year term of a patent which gives an unacceptably high level of monopoly right for use in sports where careers are usually short.

In addition, there is an argument that says low-cost inventions should not be patented because the inventor already acquires an advantage, that is, no financial outlay and a head-start against competitors. Kitch even suggests that “these types of inventions would exist anyway in the absence of a patent system”.[28] This is an interesting view in respect of sports moves which are most likely entirely financially free, other than the cost in time. This supports the argument that for those already successful sportspeople, the incentive should be to develop their art with the knowledge that they will continue to benefit financially from marketing opportunities.

Sportspeople seek ways to ensure that they have a competitive advantage over their fellow competitors. Lockean theory says that “everyone has a property right in his own body’ (pg.21 Module Handbook). Kunstadt[29] argues that a sportsperson who by their own labour invents a new sports move which enhances their sporting ability should be entitled to protect it. The invention, by its very nature is new, therefore not in the public mind before they invented it. Therefore, he is not taking something away from society, but adding a benefit to society whilst providing him with a competitive advantage which he should be able to enjoy a monopoly right over, albeit for a limited time.

Patents encourage innovation and if patents were not granted for sports moves, it could be argued that there would be no development and improvement in sports. If we take Fosbury as an example; prior to the 1968 Mexico City Olympics in which Fosbury displayed his new move the sport had remained static. Following his Gold Medal win (could it be argued that had he obtained a patent, then high-jump competitors may have been more inclined to develop and innovate new
(methods of jumping?) one would have assumed that there was an almost overnight change however, he is quoted as saying in an interview that

The problem with something revolutionary like [the Fosbury Flop] was that most of the elite athletes had invested so much time in their technique and movements that they didn't want to give it up, so they stuck with what they knew. It took a full decade before the flop began to dominate the sport.[30]

Interestingly, it seems that it was the younger generation who were most able to explore this method of clearing the bar, rather than the already established athletes. However, it is Fosbury’s competition whom you think would most want to enhance their chances of success by using his method. Patents last for 20 years, it took 10 for others to use it as standard. Therefore a patent would not have caused problems in the sport. Also Fosbury could have licensed it and given classes in how to use it as ways of making money from it and developing it. This could actually have helped the flop to become used sooner than it was. What this tells us is that in the 4000 years since the Olympics began we still only have two ways of high-jumping, it is not exactly at the cutting edge of technological advancement. If Fosbury had wanted to license his method, he would have had no takers. We know this because even though it was free it took ten years to become commonplace.

Sports Apparatus

The sporting world accounts for a large percentage of the worlds patents in respect of sporting apparatus. Certain sports, such as golf, have built a thriving commercial marketplace where manufacturers seek to outsell their competitors with ever more varied golf clubs and golf balls appearing on the market. Such manufacturers seek to protect their latest technological advancement by using patents.

Sports apparatus patents are a major source of finance for manufacturers and it is true that innovation in this area continues to grow as a result. In terms of sports apparatus, this area also benefits from harmonization.

There are certain to be few objections to the use of patents in respect of sports apparatus. This
may be due in part to the tangible nature of sports apparatus. The average sports fan can see why a particular piece of equipment is different or special when compared to other similar items. He can appreciate its novelty and will invariably understand why its inventor might want to protect their product through the intellectual property system. However, the same cannot be said of sports moves.

The US is one of the world’s three largest producers of patents, the other two being Germany and Japan. It cannot be a coincidence that these three are also the world’s largest economies. One could argue that this is due to their liberal viewpoint on patents and the encouragement that this gives to industry and those inventors willing to make technological leaps. The US’s liberal granting of patents to what the UK courts would likely consider spurious applications has certainly not hindered their economy, and some might suggest that this has actually helped to strengthen it. Topically, the UK has recently announced a new 10% tax on earnings from Patents, thereby improving the financial incentives to inventors.

V Perspectives

It is impossible to discuss the issues surrounding the granting of patents without also considering the interrelationship between the main interested parties in a sporting environment. (see fig.1) If we assume that there are three main parties; the competitor/sports person, the sporting body and the inventor we can analyse the motivation for each party to obtain a patent for sports related inventions and sports moves.

Fig. 1 Relationship between Interested Parties in Sports Environment

Competitors / Sports Person
To the competitor, the main driving force is personal success. Competitors are motivated by acclaim and the subsequent rewards, which may not necessarily be financial. A competitor who invents a method which gives them a competitive advantage is going to be driven by the desire to be the best in their sport for as long as possible. Even if this advantage is only short-lived it will be enough for the sportsperson to achieve acclaim and possibly financial success through other avenues such as advertising.

**Sporting Body**

This player has the most interests to balance. They are motivated by the financial rewards that flow from entertainment. The sporting body seeks to promote competition on a level playing field so as maintain the public interest in their particular sports event. Where the inventor is a sporting body the logical outcome is two-fold; they either make the invention available to all the competitors within their remit, or to none. They can operate this through a system of licenses. Leagues can regulate by either forbidding the use of patented sports move within their leagues or by only allowing them to be used only where it is conditional upon the move been available via license to every other team or sportsperson within the league.

**Inventor**

The inventor who is neither a competitor nor a sporting body may still be allied to a particular team or sports person e.g. a coach. In this case they will wish to patent their sports move in an attempt to gain exclusivity thus preventing competitors from benefiting from the move. Inventors are often motivated by “esteem or symbolic capital [flowing] from being recognized as an inventor”. If this is the case and the inventor is simply a person with an interest in a particular sport then the driving force may be to make it available to every competitor. This is where the licensing system would play a role. The inventor could license it for both financial reward and the esteem that comes with being recognised as the inventor of a new and successful sports move.
Ownership

The Patents Act refers to the owner of a patent as ‘proprietor’; however, ‘proprietor’ is not defined within the Act. Instead, s.7 sets out who may apply for a patent and to whom a patent may be granted. Although any person may apply for a patent, it will only be granted to a “limited category of persons”; the inventor or joint inventor, another person who was entitled to the property in the invention, or the successor or successor’s in title of those mentioned above.

The Employment Perspective: Employee Inventions in a sporting context

Irrespective of who the inventor is, the issue of intellectual property ownership in an employment relationship must also be considered. If the coach creates the move, or even the employed player, then it cannot be utilised for marketing to increase the earning potential of the sports personality themselves because they do not ‘own’ the invention. Where a sportsperson is employed, either as an individual athlete or as part of a team, the proprietorship in any invention which he may create “shall be taken to belong to his employer where it was made in the course of their normal duties or those specifically assigned to them, and where it might reasonably be expected to result from the carrying out of their duties” or because of a ‘special obligation’ which existed due to the nature of the employees duties.

Where a sports move invented in the course of employment acquires a patent the sportsperson may find that although they are recognised as the inventor they are unable to directly benefit financially from it. In the case of sports apparatus and sports moves, the main benefit to be derived for the sportsperson as inventor is that they have the right to be named upon the patent. For some this may be enough, and there is the possibility that being named as either the only or a co-inventor may bring advertising and marketing opportunities for the sportsperson. Whilst they would be unable to profit from the licensing of the actual apparatus or move, they would be so closely associated with it that it would enhance their status as a personality. Contractual provisions can be utilised to determine the opportunities that would be available to sportspersons in this position.
A further difficulty arises where a sports coach invents a move with the cooperation of the sportsperson. How much input from the sportsperson will entitle him to be a co-inventor? There are bound to be circumstances where the coach is the inventor of a new move but the only way in which he can assess its efficacy is to practice, develop and refine it with the aid of the sportsperson. Alternatively, the sportsperson requires the assistance of his coach to hone the move.

There are two problems which arise in these circumstances. Firstly, one person claims to be the inventor, rather than the person named in the patent. Secondly, where either the coach or the sportsperson is recognised as the inventor and the other is not a question about contribution arises. The courts are often called to determine the identity of the true inventor where more than one person claims the right. In doing so the courts look “to the ‘inventive’ elements of the invention … [and to then] consider if the claimant was responsible for the development of some or all of those elements”[38] as a means of determining entitlement.

A sport which benefits greatly from the patentability of sporting apparatus is that of Formula 1 motor racing. There are issues when the employee inventor takes knowledge of inventions to his new team and can use this inside knowledge to invent around inventions which he developed for the previous employer. Competing teams can reverse engineer inventions, a method often used by other industries to negate a competitive advantage. Despite the migration of knowledge between teams Formula 1 thrives on innovation and continuous development. Governing bodies, such as the FIA, have been known to take a hard line approach to policing infringement in an attempt to protect the reputation of the sport.

VII Conclusion

Patent law is at the forefront of innovation and development. As such it must respond to changes and technological advances before society has an opportunity to be able to accept or appreciate it. This inevitably leads to debate about the merits for granting patents to particular inventions. In recent times we have seen the debate feature around biotechnology and, of particular
interest in the context of this essay, sports moves.

Had Dick Fosbury tried to patent his method of clearing the high jump bar he would most likely have succeeded on both novelty and inventive step. Not only was he the only person at the time who performed the high jump in that way, but he is quoted as saying that it was a further ten years before other professional high jumpers were using the method. He put this down to the fact that the scissor jump was so ingrained in professional high jumpers that they were reluctant to give it up to try something new. This clearly defines the notion of inventive step by virtue of the fact that no-one else was likely to come up with the Fosbury flop because they were more than happy with the status quo. It is interesting that the only people he said were keen to try his new method were children and college kids, i.e. those who were not shackled by custom and practice.

Patents may really only be possible for certain types of sports moves, such as those ‘which provide a useful result, such as faster races or longer jumps.’ Kunstadt’s article advocates the use of the full spectrum of intellectual property rights for sports moves, not just patents. Abromson believes that sports moves should be afforded copyright protection on the basis that they “satisfy the conditions required of copyrighted works”. However, we must remember that Abromson is writing not only from a US perspective, but in particular about section 102(a) of the Copyright Act of 1976, not the Patents Act.

It has been suggested that intellectual property is a term which has negative connotations and that it should be more appropriately called “Intellectual Objects”. If sports enthusiasts saw intellectual property rights as something other than ‘property’ this might make it easier for them to appreciate the need for the patentability of sports moves. What is clear is that the use of patents as a way of protecting sports moves is a method at the cusp of development. Those brave enough to embrace it now may be reaping the rewards ahead of the race.

Presently, there is no argument against the patenting of sports apparatus, so long as each invention meets the requirements of the respective acts as set out above. Applying UK law, sports moves cannot constitute patentable subject matter for the reasons as follows: there are more
appropriate and enforceable means of protecting the earning potential of sportspersons. These are contract law, copyright and trademark provisions. The patent system should not be used for sports moves.
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[1] Patents Act 1977, s.25
[2] Patents Act 1977, s.7(2)
[6] Patents Act 1977, s. 1(1)(a), and s.2
[7] Patents Act 1977, s. 1(1)(b), and s.3
[8] Patents Act 1977, s. 1(1)(c), and s.4
[9] Patents Act 1977 s. 2(1)