Intellectual Property Office

BL O/183/16

12th April 2016

PATENTS ACT 1977

PROCEEDINGS

Application under Section 72 of the Patents Act 1977
to revoke UK Patent No. GB 2 459 372 C

BETWEEN

TWI Limited	Claimant
and	
Zircotec IP Limited	Defendant

HEARING OFFICER Stephen Probert

For the claimant: Helen Jones of Gill Jennings & Every LLP
For the defendant: Richard Davis of Hogarth Chambers

Hearing date: 12 February 2016

DECISION

Introduction

1. The claimant TWI Limited ("TWI") applied to revoke patent GB 2 459 372 C ("the patent"). The patent belongs to the defendant, Zircotec IP Limited ("Zircotec").

2. The patent relates to a method of coating articles that have a surface made of, or containing, an organic material - eg. carbon fibre composite. More specifically, the method involves thermally spraying the article with a first layer that is wholly or principally metal, and then depositing a second layer on top of the first layer, in which the coating material used for the second layer (typically a ceramic) has a higher melting point than that of the first layer and a porosity greater than 5%.

3. The method can be used to coat a wide variety of articles - eg. heat shields for engines, car body parts, golf clubs, bicycle wheel rims, and even hip prostheses (or other medical and/or orthopaedic implants).

Issues

4. TWI contends that the patent is invalid for lack of:-

    a. novelty over a US patent specification ("D1"),

b. lack of inventive step over D1 and eight other documents ("D2 to D9"), and

c. sufficient disclosure, having regard to the porosity of the second layer.

5. The issues of novelty and inventive step have already been traversed to some extent by the parties following a request by TWI for a statutory opinion on the validity of the patent. The opinion, which issued on 30 July 2014 with the number 12/14, concluded that the patent is invalid. However, statutory opinions are non-binding and I have not given the opinion any weight in reaching my decision. The statutory opinion may be a factor when I come to consider costs.

Expert Witness

6. Zircotec called Mr Terence Graham as an expert witness. Mr Graham is the Managing Director of Zircotec, a position he has held for more than eight years. Earlier in the proceedings, it looked as though Mr Graham's status as an expert witness might be an issue. TWI had objected that Mr Graham was not independent, given his role within Zircotec, and said that his evidence should not be admitted into the proceedings. After reading Mr Graham's expert report, I decided that it should be admitted, but indicated that I would hear submissions at the hearing as to the weight that I should give it. At the same time, I agreed to TWI's request to cross examine Mr Graham.

7. Mr Davis came to the hearing well-armed with relevant authorities to defend his expert witness' right to give evidence. In the event, he was pushing against a door that was more than half open. The majority of Mr Graham's evidence, and in particular everything he added during cross examination, was balanced and I found it very helpful. I have no hesitation in saying that Mr Graham came across as a careful and honest witness, who showed that he understood his duty to the tribunal.

8. A large part of Mr Graham's evidence deals with facts, especially for example in relation to what was well known in the industry at the relevant time. I did however express my concerns about those areas of Mr Graham's report in which he gives his opinion on issues such as inventive step - not because I have any reason to doubt the genuineness of his opinions, but because I felt it would be unfair to the claimant to give significant weight to the opinion of an expert witness who, as the Managing Director of the defendant company, obviously has a major interest in the outcome of the proceedings. Consequently, in relation to these issues I have not relied upon Mr Graham's opinion.

The common general knowledge

9. I was referred to the judgment of Floyd J in *Lundbeck v Norpharma* [1] which provides the following summary of the law regarding common general knowledge:-

> 20 The law about the distinction between matter which is part of the common general knowledge, and matter which is merely known or even widely known is stated in *Beloit Technologies Inc v Valmet Paper Machinery Inc* [1997] R.P.C. 489 at 494-495, relying on the well known judgment of the Court of Appeal in *General Tire and Rubber Co v Firestone Tyre and Rubber Co Ltd*

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[1] *H Lundbeck A/S v Norpharma SpA* [2011] RPC 23

[1972] R.P.C. 457 . The matter must be "generally accepted as a good basis for further action" amongst those skilled in the art. The distinction is important in the law of obviousness because, although it is in general permissible to combine the contents of an individual published citation with matter which is part of the common general knowledge, it is impermissible to make so-called mosaics of individual citations (unless it would be obvious to do so).

10. With this in mind, and having regard to the evidence in these proceedings, I conclude that the common general knowledge includes the contents of a particular textbook entitled the 'Handbook of Thermal Spray Technology". Selected pages of this publication ("D2") were filed by the claimant. During cross-examination Mr Graham accepted that this publication was part of the common general knowledge in his technical field. He confirmed that his company has several copies of it, and that they are regularly consulted.

11. Thermal spraying is a generic term for a group of coating processes used to apply metallic or non-metallic coatings to the surface of an article. These processes are grouped into three major categories: flame spray, electric arc spray, and plasma spray - according to the energy source that is used to heat the coating material (in powder, wire or rod form) to a molten or semi-molten state. The heated coating material is then propelled toward the surface by process gases or atomisation gases. Upon impact a bond forms with the surface, with subsequent particles causing a build-up of thickness.

12. The droplets or particles of the coating material that impact on the surface are called "splats". Before impact, they tend to be generally spherical in shape. The impact causes them to flatten into disk-like shapes. Inevitably there will be voids between the splats, leading to a porosity of the coating. The degree of porosity, expressed as a percentage, depends on several factors - eg. the size of the droplets, the degree of melting of the sprayed droplets and the angle of impact with the surface. Although it is possible to control the porosity of a coating by varying these factors, Mr Graham considered that it would be impossible to achieve a porosity lower than 4% using thermal spraying.

13. Mr Graham described several ways of measuring the porosity of a coating, all of which he considered would be common general knowledge to the person(s) skilled in the art. (This was significant because the claimant's case in relation to sufficiency is that the patent does not describe any method of measuring the porosity, such that the person skilled in the art could not be sure whether a particular product falls within the scope of the claims.)

The Law

14. These proceedings have been initiated under section 72, the relevant parts of which read as follows:-

> 72.-(1) Subject to the following provisions of this Act, the court or the comptroller may by order revoke a patent for an invention on the application of any person (including the proprietor of the patent) on (but only on) any of the following grounds, that is to say -
>
> (a) the invention is not a patentable invention;
>
> (b) …..

(c) the specification of the patent does not disclose the invention clearly enough and completely enough for it to be performed by a person skilled in the art;

(d) …..

The claims

15. The patent as granted contains 96 claims, but the only claims that I need to consider at this point are the two independent claims (1 and 44), to an article and a method respectively. In its statement, the claimant labelled five distinct features (F1 to F5) of claim 1 to assist with construction of the claim. The defendant's evidence helpfully adopted the same system, and it was also used during the hearing.

F1 1. An article, the article including a substrate, at least a surface of the substrate being made of or containing an organic material, and a thermal sprayed first layer of coating material on the surface, and a further layer on the first layer,

F2 the coating material of the first layer being wholly or principally metal material,

F3 the first layer being less than 200 micrometres in thickness

F4 and the further layer being of a material with a higher melting point than the coating material of the first layer,

F5 wherein the level of porosity in the further layer is greater than 5%.

44. A method of coating a substrate surface made of or containing an organic material, the method comprising thermal spraying the surface with a first layer of coating material to a thickness of less than 200 micrometres and depositing a further layer on the first layer, the coating material of the first layer being wholly or principally metal material, the further layer being of a material with a higher melting point than the coating material of the first layer, wherein the level of porosity in the further layer is greater than 5%.

16. The claimant conceded in its counter-statement that features F1, F2 and F3 were all disclosed in the prior art (D1). During cross-examination, Mr Graham admitted that D1 also anticipates feature F4. So the battle ground in relation to the issues of novelty and inventive step was confined to the issue of porosity (F5).

Novelty

17. The claimant's attack on novelty is based on US 2002/0059727 A1 ("D1"). D1 was published in May 2002, nearly six years before the priority date of the patent in suit. It describes a method of coating a 'roll' (or roller) for use in a paper-making machine. Although D1 is primarily concerned with a method of thermal spraying a ceramic coating onto the roller, it clearly states that an optional bond coat may be thermally sprayed onto the roller first. The bond coat is said to be 80% nickel and 20% chrome (ie. metal). D1 also says that other metals, such as zinc, aluminium, tin could be used for the bond coat, and recommends a thickness of 0.003 inch (equating to 76.2 micrometers). The defendant accepts that this bond coat anticipates features F2 and F3.

18. The roller of D1 is then thermally sprayed with a ceramic layer comprising about 60% aluminium oxide (Al_2O_3) and 40% titanium dioxide (TiO_2). Mr Graham agreed during

cross-examination that the melting point of this ceramic material is higher than the melting point of the nickel/chrome bond coat. Thus D1 also anticipates feature F4.

19. That just leaves the issue of porosity. On this point, D1 says that the thermal spraying equipment should be adjusted to achieve "a porosity of between 4 and 6%". This clearly includes a sub-range of porosity above 5%, but the patentee's defence is that D1 does not provide an '*individualised disclosure*' of any value within this range, and that therefore there is no '*individualised disclosure*' falling within the inequality >5% porosity. Moreover, Mr Davis submitted that the whole teaching of D1 is directed towards providing a hard wearing surface for the roller. He argued that the skilled reader would understand from common general knowledge that s/he should really be aiming to reduce the porosity as far as possible within this range in order to maximise the wear resistance of the roller.

20. I admire the resourcefulness of Mr Davis' argument, but I think the facts of this case are firmly against him. There was much discussion at the hearing regarding the law of so-called selection patents. For example, Mr Davis relied on a number of precedent cases[2] in support of the principle that a generalised disclosure does not, without more, disclose all the members of the class and is not therefore novelty destroying. In the event I have concluded that none of this really helps, perhaps because the patent in suit is not an example of a selection patent. Furthermore, Mr Graham confirmed during cross-examination that in practice it is difficult to achieve a porosity lower than 5% using thermal spraying, and that 4% is the lowest that one could hope to achieve. Against this background I have no hesitation in concluding that the disclosure in D1 of a porosity of between 4 and 6% does destroy the novelty of a claim that relies on a porosity greater than 5%.

Inventive step

21. In the circumstances I do not need to consider the question of inventive step of claims 1 and/or 44. However, both parties made extensive submissions on the subject, and eg. went to some lengths to establish the bounds of the common general knowledge in this field. All I need say is that even if D1 had not disclosed a porosity greater than 5%, I would have felt compelled to decide that claims 1 and 44 lack an inventive step having regard to the other features disclosed in D1 (ie. F1 to F4) when combined with the common general knowledge (eg. D2 and the expert evidence of Mr Graham) that it is difficult to achieve a porosity that is not greater than 5%. In other words, specifying a porosity greater than 5% does not (in practice) make a significant difference to the scope of the claim.

Sufficiency

22. The attack on sufficiency may also be academic in view of my decision regarding novelty. But, again for the sake of completeness, and because of the possibility of amending the specification to cure the lack of novelty, I will say that the attack (based on section 72(1)(c)) fails. The claimant's case on sufficiency is that the scope of the claims is defined by specifying the percentage porosity of the further coating, whereas the patent does not describe any method of measuring the porosity of a coating. In reply, the defendant says that methods of measuring porosity of coatings

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[2] *General Tire & Rubber Co v Firestone* [1972] RPC 457 at 485, *Dr Reddy's v Eli Lilly* [2010] RPC 9, and *Lundbeck A/S v Norpharma* [2011] RPC 23.

are well known in the art. Mr Graham's witness statement (or expert report) describes one such, and Mr Graham expanded on these techniques during cross-examination. On this basis I consider that the specification of the patent is clear and complete enough for it to be performed by a person skilled in the art.

Conditional amendments - Sect 75

23. On 22 October 2015, the defendant filed an alternative set of claims with a request for conditional amendment under section 75. The proposed amended claims were considered by a senior patent examiner who reported several deficiencies and recommended that the amendment should not be allowed. A further alternative set of claims was filed on 27 January 2016 with another request for conditional amendment under section 75. Once again, the senior patent examiner reported several deficiencies with regard to added matter, clarity and conciseness - noting however, that the second set was better than the first set.

24. In order to deal with the case expeditiously and fairly[3], having regard to the imminent hearing date (12 February 2016), and the deficiencies in the amended claims as reported by the Office, I forewarned the parties that I would not be considering the proposed amended claims at the hearing. I directed that if the claimant were to succeed in demonstrating that the patent as granted is invalid, I would consider whether an amendment might cure the defect(s). If so, I would consider whether to give the defendant an opportunity to amend in order to avoid revocation of the patent - as envisaged in paragraph 72.43 of the Manual of Patent Practice [4].

25. This has proved to be the hardest part of this decision. After giving the matter long and careful thought, I have concluded that the defendant should be given one further opportunity to amend.

26. As Mr Davis reminded me, the law on discretion to amend has changed, in particular with the coming into force of the Patents Act 2004, the effect of which is to require the Comptroller to have regard to any relevant principles applicable under the European Patent Convention (EPC) [5]. This means in practice that I should not consider the behaviour of the patent proprietor (the defendant in these revocation proceedings) when exercising discretion in allowing amendments.

27. However, that does not mean that the Comptroller must exercise discretion to allow the amendments that have been proposed. Mr Davis accepted that there remains 'a tiny residual discretion'. As stated at 27.33 of the Manual of Patent Practice:-

> "Having given regard to the principles of the EPC with respect to central limitation and having sufficiently distinguished the two processes, the reasonable conclusion is that the lack of discretion for the EPO to refuse a central limitation request meeting the formal requirements does not limit the comptroller's discretion to refuse an amendment under section 27 on the basis of lack of novelty or inventiveness of the proposed amendment".

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3 In keeping with the overriding objective - eg. rule 74(2)(d)

4 See the reference to *Nikken Kosakusho Works v Pioneer Trading Co.* [2006] FSR 4 at MoPP 72.43.

5 See section 2(5) of the Patents Act 2004, which amends section 75 of the Patents Act 1977.

28. Although this is the practice in relation to section 27 (General power to amend specification after grant), it is widely understood that similar considerations apply in relation to section 75 (Amendment of patent in infringement or revocation proceedings) which is the relevant section in this instance. As I understand it, this means that the Comptroller does not have to accept an amendment to a patent if it would leave the patent lacking in either novelty or inventive step.

i) The claim 18 amendment

29. Although as noted above, there were a number of deficiencies with both versions of the amended claims proposed by the defendant, the basic intention is to narrow down to a particular alternative within claim 18 (of the patent as granted). I did hear submissions from both parties in relation to the validity of claim 18, as it is part of the granted patent and therefore not excluded from consideration by my case management decision concerning the proposed amended claims.

30. Claim 18 specifies that the further layer comprises at least 50% of at least one of zirconia, titania or alumina. Mr Davis accepted that if claim 1 lacked novelty, then claim 18 would also be anticipated in relation to titania and alumina because these are clearly disclosed as possible ceramic coatings in D1, but he maintained that claim 18 when based on zirconia would be both novel and inventive. Mr Davis gave me several reasons why it would not be prejudicial to the claimant if I were to determine the validity of claim 18 (limited to zirconia) now:-

    i) the claimant dealt with all three variations, including the 'zirconia only' version, of claim 18 in its statement at the beginning of proceedings,

    ii) the 'zirconia only' version of claim 18 has been around since October 2015 when the defendant first proposed it, so it should not be a surprise to the claimant,

    iii) the claimant has addressed the 'zirconia only' version of claim 18 in its skeleton argument,

    iv) Ms Jones also dealt with the 'zirconia only' version of claim 18 during her cross-examination of Mr Graham and in her subsequent submissions to me.

31. For these reasons, I agree that it is fair and reasonable to consider whether the zirconia variation of claim 18 is novel and inventive. If it is, I see no reason why the defendant should not be given the opportunity to keep claim 18 by simply deleting the titania and alumina options.

32. Claim 18 would then look exactly the same as claim 1 of the amendments proposed by the defendant in October 2015 and again in January 2016. That is:-

> 1. An article, the article including a substrate, at least a surface of the substrate being made of or containing an organic material, and a thermal sprayed first layer of coating material on the surface, and a further layer on the first layer, the coating material of the first layer being wholly or principally metal material, the first layer being less than 200 micrometres in thickness and the further layer being of a material with a higher melting point than the coating material of the first layer, wherein the level of porosity in the further layer is greater than 5%, **and wherein the further layer comprises at least 50% zirconia**.

33. There is no issue in relation to novelty. The prior art (eg. D1) does not disclose the use of zirconia as a material for a further coating layer on top of a thermally sprayed metal layer. So claim 18 would be novel if limited to zirconia.

34. Inventive step is not so straight forward. Mr Davis mounted a spirited defence of the inventiveness of using zirconia as the further coating layer, but I am not persuaded. It is common general knowledge (as demonstrated by D2 and confirmed in cross-examination by Mr Graham) that zirconia is a ceramic material suitable for use in thermal spraying applications. But according to Mr Davis, both D1 and the common general knowledge teach away from using zirconia because other ceramic materials are more hardwearing. I agree that D1 places a premium on the wear resistance of the ceramic coating, but I don't agree that it teaches away from the use of zirconia. It simply doesn't mention zirconia. What D1 does say is that the further layer may be formed from "*other suitable types of wear resistant materials, such as a sputtered metal, etc.*" - see para [0023].

35. Mr Davis submitted that zirconia is not known in the common general knowledge (or the prior art) as a wear resistant material, and that it would not therefore be obvious to use zirconia instead of eg. titania and alumina. I think that is stretching the argument too far. It seems to me that it is common general knowledge in this field that there is a range of ceramic materials, including titania, alumina and zirconia, that can be used in thermal spraying applications. All of them are hard wearing materials, albeit some are more hardwearing than others. It does appear that titania and alumina are more hardwearing than zirconia, but that does not mean that zirconia is not a wear resistant material. For example, if zirconia is not wear resistant, it would not be suitable for use in the embodiments of the patent in suit. In this regard, I note that the specification of the patent in suit says of magnesium zirconate (a compound of zirconia) - "*This has good resistance to abrasion and other mechanical damage and is very hard*".

36. I also note that some of the embodiments in the patent relate to heat shields. It is clear from D2 that zirconia is well known as a thermal barrier coating, even if other ceramics have better wear resistance.

37. For these reasons, I conclude that a zirconia only version of claim 18 would not involve an inventive step. As far as I can see, there is no invention in the use of zirconia, instead of titania or alumina, as the material to be used for the further coating layer. These are alternatives that would have been well known to the person skilled in the art at the priority date of the patent. It follows that there is no reason for me to allow the defendant to amend the patent by deleting titania and alumina from claim 18 to preserve that claim. For completeness, the same applies to claim 66 of the patent, which is a method claim corresponding to claim 18.

ii) Is higher porosity the inventive concept?

38. In the course of his submissions, Mr Davis identified the inventive concept in the patent as the use of a higher porosity in the further coating layer. He argued that the inventors were the first to appreciate that deliberately selecting a higher percentage porosity has an effect during deposition which is advantageous in the case of a substrate made of or containing an organic material because it reduces the amount of heat transfer which would otherwise damage the article being coated. If this

argument stands up to scrutiny, it might persuade me to allow the defendant a specified period in which to draft a suitable set of claims.

39. But the argument, at least in relation to claims based on greater than 5% porosity, does not stand up. This is for two reasons. Firstly I do not accept that the inequality >5% shows that the inventors have selected a higher porosity. The evidence before me is that 4 - 6% is the lowest porosity that can be achieved using thermal spraying, so in practice the restriction to 'greater than 5%' in the claim is almost meaningless because one would struggle to achieve anything else. Secondly, according to the independent claims of the granted patent (and the proposed amended claims), the further layer need not be thermally sprayed; in which case the porosity of the layer would have no bearing on the subject of heat transfer, and the inventive concept suggested by Mr Davis would not be realised.

40. Unfortunately the patent specification is rather ambiguous in this regard. For example, the description of the patent says that the first layer may be a foil, or may be incorporated in the organic material of the substrate - neither of which appear to be consistent with the "thermal sprayed first layer" required in claim 1. Conversely, the description does not disclose any alternative to thermal spraying of the further layer, but it is not until claim 12 that the further layer is required to be thermally sprayed. This clearly tells me that the patentee did not intend the scope of claim 1 to be limited to a thermally sprayed further layer.

iii) Greater than 15%

41. With regard to the first reason given in paragraph 39 above, I have noticed that dependent claim 21 specifies that "the porosity in the further layer is at least 15%". The basis for this is found in the following paragraph on page 3 of the patent:-

> "Preferably, the level of porosity in the further layer is preferably greater than 15%. This allows a low deposition rate to be used and also allows the further layer to better accommodate strain associated with thermal mismatch. Therefore the coating layer[6] need not be as thick in order to protect the substrate from heat damage during deposition of the further layer or to take up the flex associated with thermal mismatch."

42. This is clearly the passage that Mr Davis had in mind when he described to me the inventive contribution made by the inventors.

43. As a result, it appears to me that there is a scintilla of invention in claim 21 (*porosity greater than 15%*), when dependent on claim 12 (*further layer is thermally sprayed*) which in turn is dependent on claim 1. This claim is clearly novel over D1 because D1 only discloses a coating with a porosity of between 4 and 6%.

44. The claimant's case against claim 21 is spelt out in its statement of claim. They point out that it is common general knowledge that higher levels of porosity can be beneficial for thermal insulation. This is confirmed by a reference to D2, where porosities of 8-15% are said to increase thermal insulation. However, this is referring to the thermal characteristics of the formed coating. It is not, as I read it, teaching that increased porosity protects the substrate from heat damage during deposition. As far as I am aware, there is nothing in the prior art or the common general

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[6] The 'coating layer' is called the first layer in the claims.

knowledge that would point the person skilled in the art in this direction. I therefore consider that this claim involves an inventive step.

45. The ambiguities in the patent specification, and the reluctance of the patentee to address the challenge to validity (both in these proceedings and in response to the earlier statutory opinion) are strong reasons for not allowing the defendant any further time to rectify the defects of the patent[7]. Furthermore, the number and complexity of the amended claims already proposed by the defendant fill me with dread at the prospect of having to deal with all the problems that are likely to arise in connection with any further set of amended claims submitted by them.

46. Several other factors that I need to consider were listed by Henry Carr QC, sitting as a Deputy Judge in *Monkey Tower Ltd v Ability International Ltd* [8]. They are:-

    a. The resources already devoted by the parties to the proceedings.

    b. The extent of any re-litigation as a result of the amendment.

    c. The likelihood that a valid amendment can be proposed.

    d. Whether there is evidence that prejudice will be caused to the applicant for revocation by the delay caused by an application to amend.

47. Having considered the above factors, I have decided to allow the defendant/patentee a brief period of one month in which to amend the patent to cure the defects by replacing the entire set of claims with the two claims reproduced at Annex 1 to this decision - essentially claim 21 when dependent on claim 12, and a corresponding method claim. In the circumstances of this case, and having particular regard to the factors listed above, this is the only amendment that will satisfy the Comptroller.

48. In this case, there has already been a hearing with full oral argument and cross-examination. However, the written evidence has not been extensive, and the claimant did not file any written evidence[9].

49. The risk of re-litigation as a result of an amendment cannot be entirely avoided as any amendment must necessarily be advertised for opposition in accordance with rule 75. However, it ought to be possible to minimise the risk of further litigation if the opportunity to amend is restricted to a claim (or claims) that have already been published in the granted patent[10].

50. Similarly, the likelihood of a valid amendment being proposed is significantly increased if the patentee proposes only claims that I have already found to be valid - ie. as in Annex 1. Moreover, the prejudice to the applicant for revocation caused by

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[7] The behaviour of the patentee is no longer an issue in relation to amendments under section 75, but that does not mean that I should not take it into account in deciding whether or not to allow an opportunity to amend under section 72(4).

[8] *Monkey Tower Ltd v Ability International Ltd* [2013] EWHC 18 (Pat)

[9] NB. This is not a criticism. In my view the claimant's approach to the evidence was entirely appropriate.

[10] For some reason, the granted patent does not include a method claim limited to porosity greater than 15%, but I consider this omission to be a matter of form rather than substance.

the delay that such an application to amend will cause should be minimal; either the defendant proposes to amend as permitted in Annex 1 within a month, or revocation of the patent follows.

51. I am aware that this is a very narrowly defined opportunity to amend. That is deliberate. Anything less specific would be certain to result in prolonged re-litigation which would be unduly expensive, and unfair to the claimant, as well as being against the public interest. The patentee has already had ample opportunity to amend the patent - it is time to take it or leave it.

52. There will, of course, be an opportunity for the claimant to object to an amendment. However, on the assumption that the claimant has already put forward its best case against claim 21 (the only amendment that will satisfy the Comptroller), it is hard to imagine how an opposition by the claimant could succeed.

Order

53. For the reasons given above, I order the revocation of GB 2 459 372 C on the grounds of section 72(1)(a) for lack of novelty, **unless** within a month of the date of this decision, the patentee applies to amend the specification to the satisfaction of the Comptroller.

Costs

54. Notwithstanding that I have allowed the patentee an opportunity to amend in order to avoid revocation, I regard the outcome in this case to be a clear win for the applicant for revocation (claimant). Consequently they are entitled to a contribution towards their costs. I heard brief submissions from the parties in relation to costs at the hearing, but I agreed later to a request to reserve my decision on costs until after this decision has been issued. This will give the parties an opportunity to make more specific submissions in the light of my decision on the substantive issues.

55. Written submissions on costs should be provided to the Office by no later than 24 May 2016.

Appeal

56. Any appeal must be lodged within 28 days after the date of this decision.

Stephen Probert
Deputy Director, acting for the Comptroller

Annex 1

1. An article, the article including a substrate, at least a surface of the substrate being made of or containing an organic material, and a thermal sprayed first layer of coating material on the surface, and a further layer on the first layer, the coating material of the first layer being wholly or principally metal material, the first layer being less than 200 micrometres in thickness and the further layer being of a material with a higher melting point than the coating material of the first layer, wherein the level of porosity in the further layer is greater than 15%, and wherein the further layer is a thermally sprayed layer.

2. A method of coating a substrate surface made of or containing an organic material, the method comprising thermal spraying the surface with a first layer of coating material to a thickness of less than 200 micrometres and thermal spraying a further layer on the first layer, the coating material of the first layer being wholly or principally metal material, the further layer being of a material with a higher melting point than the coating material of the first layer, wherein the level of porosity in the further layer is greater than 15%.