

OPINION UNDER SECTION 74A

Patent	EP(UK) 2493412 B1
Proprietor(s)	Gate Dental Services Limited
Exclusive Licensee	-
Requester	Keltie LLP
Observer(s)	Incidental Limited
Date Opinion issued	24 July 2026

The request

1. The comptroller has been requested to issue an opinion as to whether ‘the product’, a ‘Dental Bur Stand’, manufactured and/or imported by Incidental Limited (‘Incidental’) infringes patent EP(UK) 2493412 B1 (‘the patent’).
2. The patent has a filing date of 29 October 2010 with a claimed earliest date of 29 October 2009. The patent was granted on 21 September 2016 and remains in force. As per the front page of the patent, the proprietor is Gate Dental Services Limited.
3. Observations were received from the observer, or interested party, on 7 May 2026. Observations in reply from the requester were received by the Office on 10 June 2026. Both the observations from the observer and the observations in reply have been considered.

The patent

4. The patent consists of 14 claims, of which claim 1 is the only independent claim.
5. Claim 1 of the patent, separated out using the notation provided by the requester, is as follows:

[1]	A dental bur storage device (100, 200, 700)
[2]	having a plurality of dental bur receiving holes (102, 600)
[3]	capable of retaining a plurality of different dental bur types (702) having different shank diameters
[4]	[where in], each of the plurality of dental bur receiving holes is tapered to allow a retaining fit to be established with any one of the plurality of different dental bur types having different shank diameters
[5]	[characterised in that] , each dental bur receiving hole comprises a plurality

of inwardly extending shank-stabilising protrusions (105, 504)

6. Figures 5-7 illustrate some of the aspects defined within claim 1.

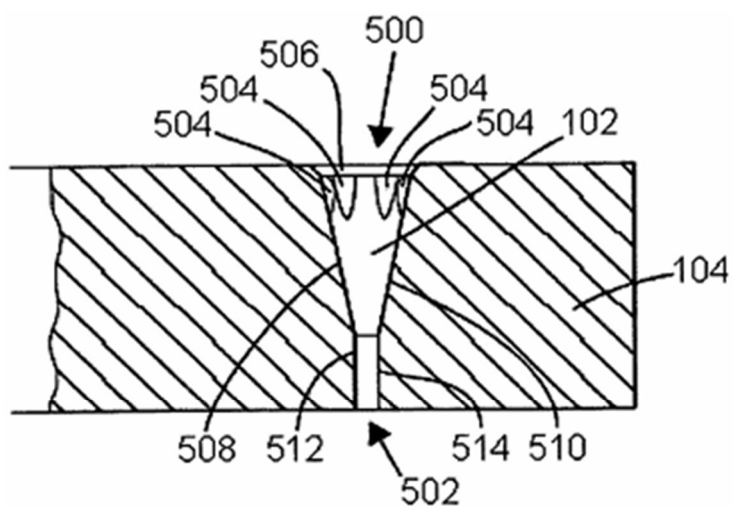


Figure 5

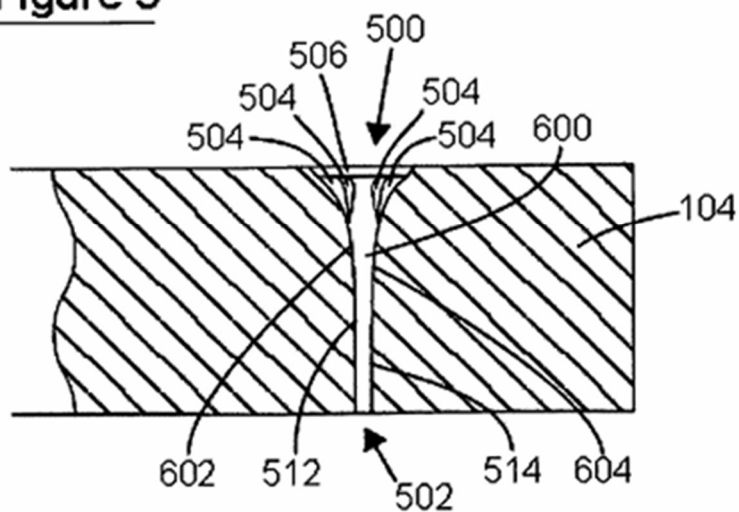


Figure 6

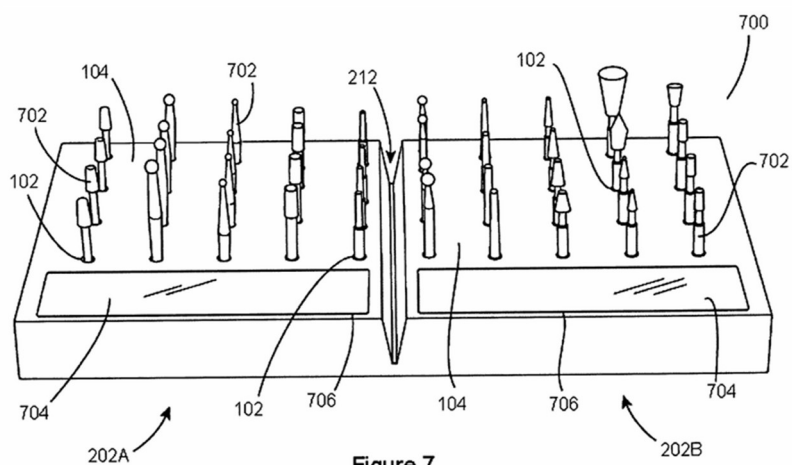


Figure 7

Infringement

7. Section 60 of the Patents Act 1977 governs what constitutes infringement of a patent; Section 60(1) reads:

Subject to the provision of this section, a person infringes a patent for an invention if, but only if, while the patent is in force, he does any of the following things in the United Kingdom in relation to the invention without the consent of the proprietor of the patent, that is to say -

- (a) where the invention is a product, he makes, disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise;*
- (b) ...;*
- (c)*

8. In the Supreme Court in *Actavis v Eli Lilly*¹, Lord Neuberger stated that the problem of infringement is best approached by addressing two issues, each of which is to be considered through the eyes of the notional addressee of the patent in suit, i.e. the person skilled in the relevant art. Those issues are:

- (i) does the variant infringe any of the claims as a matter of normal interpretation; and, if not,
- (ii) does the variant nonetheless infringe because it varies from the invention in a way or ways which is or are immaterial?

9. If the answer is “yes”, there is infringement; otherwise there is not.

Claim construction

10. Before considering if there is infringement, I will need to construe the claims of the patent. Following the authorities on claim construction, including *Kirin-Amgen and others v Hoechst Marion Roussel Limited and others* [2005] RPC 9, this requires that I put a purposive construction on the claims, interpret it in the light of the description and drawings as instructed by Section 125(1) of the Patents Act and take account of the Protocol to Article 69 of the EPC. Simply put, I must decide what a person skilled in the art would have understood the patentee to have used the language of the claim to mean.

11. Section 125(1) of the Act states that:

For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.

¹ *Actavis UK Limited and Others v Eli Lilly and Company* [2017] UKSC 48

12. And the Protocol on the Interpretation of Article 69 of the EPC (which corresponds to section 125(1)) states that:

Article 69 should not be interpreted in the sense that the extent of the protection conferred by a European patent is to be understood as that defined by the strict, literal meaning of the wording used in the claims, the description and drawings being employed only for the purpose of resolving an ambiguity found in the claims. Neither should it be interpreted in the sense that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patentee has contemplated. On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patentee with a reasonable degree of certainty for third parties.

13. The most pertinent of the claims granted in the patent is claim 1 given that this claim is the only independent claim and, *prima facie*, is the claim of broadest scope. The five integers of claim 1 tabulated above at paragraph 5, are largely straightforward to construe, but it is appropriate to clarify that a ‘dental bur storage device’ is to be construed as a storage device suitable for dental burs, and shank-stabilising protrusions are to be construed as protrusions suitable for shank-stabilisation, *et cetera*. The phrases ‘bur’ and ‘dental bur’ are themselves clearly defined at [0002] of the patent.
14. As part of construing claim 1 of the patent, it is necessary to determine the scope of the phrase ‘dental bur receiving holes is tapered to allow a retaining fit’. [0065]-[0067] of the patent explain the reference numerals given in figure 6 (reproduced above), identifying receiving hole 600 as having an upper bevelled inlet portion 506, an intermediate tapered portion defined by walls 602 and 604, and a lower cylindrical portion having sides defined by the substantially parallel sides 512 and 514. The embodiment of figure 5 of the patent is similar, but with the intermediate portion comprising straight sides 508 and 510 and having a constant rate of taper.
15. As both embodiments shown in the patent have bur holes that comprise substantially parallel sides in the lower cylindrical portion, the patent thus discloses that the tapered portion need not be the entirety of the receiving hole and, further, the patent creates a distinction between an upper-bevelled inlet portion (that is itself tapering) and the intermediate tapered portion. The upper-bevelled portion does not seem suitable for achieving a retaining fit with a dental bur, it being purposefully too large for this purpose. In their observations in reply, the requester stated that they believe construing ‘tapered to allow a retaining fit’ to mean that the taper must itself provide the retaining fit to be overly limiting. I disagree and believe ‘to allow a retaining fit’ should be construed as defining that the tapering itself provides the retaining fit, i.e. allow is being used in the sense of making something possible.
16. It is also necessary to construe what is defined by the word ‘protrusion’ in claim 1 of the patent. Notwithstanding that the embodiments covered by the figures of the patent disclose protrusions that are not integral, the skilled reader of the patent would, absent any indication from the patent that protrusions are limited to the form shown in the embodiments, take a broad construction of the word protrusion. Such a

broad construction would encompass protrusions that are integral to a dental bur receiving hole.

Does the product infringe claim 1 of the patent as a matter of normal interpretation?

17. In their observations, the interested party stated that they do 'not contest features [1], [2] and [3] of Claim 1 as analysed by the Requester' and accept that the product 'is a dental bur storage device having a plurality of bur receiving holes capable of retaining different shank diameters'. It is thus common ground between the requestor and the interested party that the product is within the scope of aspects [1], [2] and [3] of claim 1. I do not intend to dwell on these features other than to say that I agree with the assessment of both the requestor and the interested party on these points.

Integer [4]

18. Turning to aspect [4] of claim 1, the requestor provided an image, labelled as figure 3 (reproduced below) and identified as a dental bur receiving hole, wherein the portion labelled A is an entry to the bur receiving hole and portion B is the remainder of the bur receiving hole. The requestor comments that the hole is most visibly tapered in portion A but I consider their letter implies that they believe portion B to also be tapered, albeit less so than portion A.

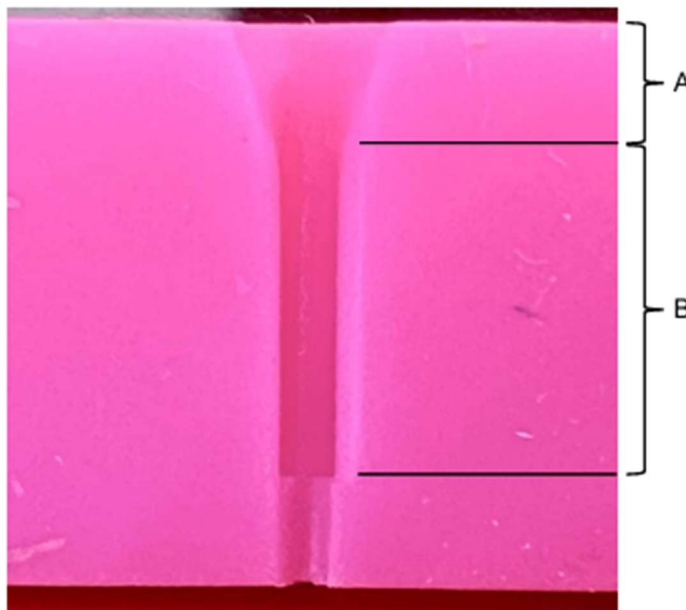


Figure 3 - A picture showing a cross-section view of an example bur receiving hole of the Incidental Bur Stand

19. Further to paragraph 15 of this report, part A of the receiving hole of the product is not within the scope of integer [4] as it is too wide a bore for establishing a retaining fit with a dental bur and is deliberately sized to be so, else it would not serve its intended function as a guide portion.
20. The interested party assert that part B of the retaining bore, analogous to the bur receiving hole, is parallel-walled. Self-evidently, parallel walls are not tapered as they maintain a constant distance between them and, if parallel, part B of the product will

not be within the scope of integer [4] of claim 1 of the patent. The interested party rely on evidence A-D, filed alongside their observations to show the parallel nature of the walls of part B of the receiving hole. I accept, as the requestor points out, that technical drawings and computer-aided drawings cannot serve as evidence as to a feature of a final product, but they do serve to show as background art detailing a specification that, manufacturing proceeding well, will be met by a final product. Irrespective of this, evidence D filed by the interested party shows, beneath a lead-in bevelled portion, a bore comprising parallel walls, and this evidence seems persuasive. Regarding any visual distinction between evidence D and Figure 3 of the request (see above), I observe that a cross-section of a cylindrical bore may appear to have tapering sides if the cross-section is not parallel to the longitudinal axis of the bore. On balance, part B of the bur receiving hole is not tapered and thus does not infringe on integer [4] of claim 1.

Integer [5]

21. Although I have established that aspect [4] of claim 1 of the patent is not infringed as a matter of normal interpretation, I shall, for completeness, also consider if part [5] of claim 1 of the patent is infringed as a matter of normal interpretation. This part of claim 1 of the patent defines that each dental bur receiving hole comprises a plurality (i.e. more than one) of inwardly extending shank-stabilising protrusions. The requestor highlights the protrusions labelled as C in figure 4 accompanying their request as being such inwardly extending shank-stabilising portions.

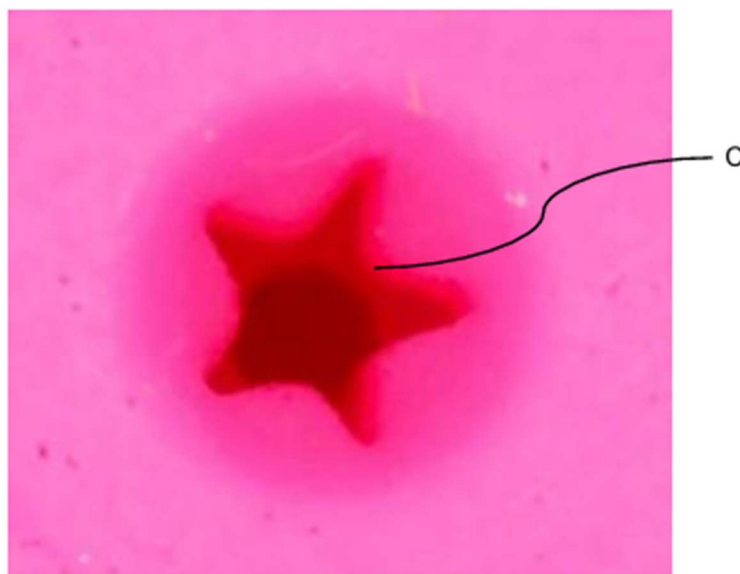


Figure 4 - A picture showing a detailed end view of an example bur receiving hole of the Incidental Bur Stand

22. In their observations, the interested party sets out that, in what they believe to be a proper interpretation of the claim, feature [5] requires discrete bumps, i.e. that the protrusions must be distinct from the bore wall. While I accept that the patent itself demonstrates that discrete bumps may be part of preferable embodiments, the patent does not disclose that this is the only way to construe the phrase. As a matter of normal interpretation, each dental bur receiving hole of the product comprises a plurality of inwardly extending shank-stabilising protrusions.
23. I consider that the product has features [1]-[3] and [5] as defined by claim 1 of the

patent, but it lacks the feature identified as [4] as the holes are not tapered. Consequently, the product does not fall within the scope of claim 1 of the patent.

24. On the basis that the product does not infringe as a matter of normal interpretation I shall go on to consider if the product infringes by virtue of an immaterial variation

Does the product infringe claim 1 because it varies from the invention in a way or ways which is or are immaterial?

25. In *Actavis v Eli Lilly*^{Error! Bookmark not defined.}, see especially [66] thereof, the Supreme Court provided a reformulation of the three questions in *Improver*² to provide assistance in determining whether a variant infringes. These reformulated questions are:
- (i) *Notwithstanding that it is not within the literal meaning of the relevant claim(s) of the patent, does the variant achieve substantially the same result in substantially the same way as the invention, i.e. the inventive concept revealed by the patent?*
 - (ii) *Would it be obvious to the person skilled in the art, reading the patent at the priority date, but knowing the variant achieves substantially the same result as the invention, that it does so substantially the same way as the invention?*
 - (iii) *Would such a reader of the patent have concluded that the patentee nonetheless intended that strict compliance with the literal meaning of the relevant claim(s) of the patent was an essential requirement of the invention?*
26. To establish infringement in a case where there is no literal infringement, a patentee would have to establish that the answer to the first two questions is “yes” and that the answer to the third question is “no”.
27. Before answering the first of the revised *Improver* questions it is necessary to elucidate the inventive concept revealed by the patent. HHJ Hacon, at [222] of *Regen v Estar*³, summarised what is meant by inventive concept and also distinguished the inventive concept from the invention as a whole. HHJ Hacon put that:
- Thus, the distinction between the invention as a whole and the inventive concept matters. The invention is that which is claimed, see s.125(1) of the Patents Act 1977. I take the inventive concept or core of the invention to be the new technical insight conveyed by the invention – the clever bit – as would be perceived by the skilled person.*
28. As is clear from the above quote, the inventive concept is distinct from the invention as claimed and relates to the new technical insight conveyed by the patent. In the

² *Improver Corporation v Remington Consumer Products Ltd* [1990] FSR 181

³ *Regen Lab SA v Estar Medical Ltd* [2019] EWHC 63 (Pat)

observations in reply, the requestor defines the inventive concept as 'how to improve gripping of a plurality of dental burs of different shank diameters in a hole with common geometry'. I think this is too broad a statement to form the entirety of the inventive concept as it omits the new technical insight, which forms the 'how' part of the inventive concept proposed by the requestor.

29. The inventive concept, or core, of the current invention is the use of dental bur receiving holes of tapering cross-sectional area wherein each hole comprises a plurality of inwardly extending shank-stabilising protrusions.
30. The result achieved by the invention defined by the patent is summarised at [0021] of the patent wherein it is said that the inventive concept 'allows a wide range of different brands and different types of dental burs to be accommodated on one single dental bur storage device, or dental bur block, which greatly simplifies the process of selecting a dental bur.' Therefore, the product does achieve substantially the same result as that of the patent.
31. However, the answer to the first *Improver* question is no. The product achieves substantially the same result but does not achieve it in substantially the same way as the inventive concept revealed by the patent. The inventive concept revealed by the patent was identified at paragraph 29 of this report and lies in the use of holes of tapering cross-section. In the product, the result is achieved by deformation of a side wall of a dental bur receiving hole that does not have a tapered cross-sectional area. Therefore, the answer to the first *Improver* question is no and, consequently, there is no infringement.

Opinion

32. In my opinion, the product does not fall within the scope of the claims as a matter of normal interpretation.
33. Further, I do not believe that the product infringes the scope of the claims of the patent under a doctrine of equivalents.
34. Accordingly, I consider that the manufacture in the UK or the importation into the UK of the Incidental Bur Stand are not infringing acts in respect of the patent.

Application for Review

35. Under section 74B and rule 98, the proprietor may, within three months of the date of issue of this opinion, apply to the comptroller for a review of the opinion

Robert Goodwill
Examiner

NOTE

This opinion is not based on the outcome of fully litigated proceedings. Rather, it is based on whatever material the persons requesting the opinion and filing observations have chosen to put before the Office.