

OPINION UNDER SECTION 74A

Patent	EP(UK) 1494195
Proprietor(s)	Accent Signage Systems Inc
Exclusive Licensee	
Requester	Accent Signage Systems Inc, on 8 January 2009
Observer(s)	Braille-Oz Pty Ltd
Date Opinion issued	7 April 2009

The Request

1. The Requester is the proprietor of patent EP1494195 entitled: “*A hand-held apparatus for semi-automatically inserting raster* members into braille signs*” and asks whether a particular product made by Braille-Oz Pty Ltd and shown in drawings annexed to the Request would infringe the Patent if it were offered for sale in any of the European territories covered by the Patent. This Opinion can address the question of infringement only in the UK. [* “Raster” is a Registered Trade Mark in the relevant classes 8 and 19]

2. It is noted that the Requester concedes that there is no suggestion that Braille-Oz Pty Ltd intend to offer their product for sale in any of the European territories covered by the Patent. The observations state that “*our client has produced a limited number of devices similar to, but not identical with, that illustrated in Annexure 2 in Australia for experimental and testing purposes only*”. However, the observations in reply include the comment that the drawings in Annex 2 are accurate drawings of a device sold commercially in USA by Braille-Oz Pty Ltd but whether or not that is correct is irrelevant to this Opinion.

3. The request is accompanied by the following Annexes:

Annex 1: a copy of publication EP1494195B1;

Annex 2: four sheets of drawings of the alleged potentially infringing product;

Annex 3: a copy of the Druckexemplar text of the Patent, and

Annex 4: an illustrated page showing an automatic bead inserter and a manual bead inserter which are referred to in, but are not the subject of, this Request

Observations

4. Observations on the Request under Rule 96 have been filed on behalf of Braille-Oz Pty Ltd and observations in reply have been filed by the Requester.

The Patent

5. The Patent was granted on 6 February 2008 and is still in force in the UK at the time of writing. The Patent "*relates generally to a hand-held apparatus in the general shape of a pen for semi-automatically inserting protrusion members, both spherical and non-spherical, such as spheres and elongated cylindrical members with a rounded tip, respectively, into pre-drilled holes in a sign or identification product face to create raised elements of Braille characters on the sign or identification product face.*" (paragraph 1). I understand that the "protrusion members" are sometimes referred to by people skilled in this art more simply as "beads".

6. The Patent has a single independent claim and six appendant claims. The Request specifically asks for an opinion regarding claims 1, 2 and 6. The opening part of the published claim 1 contains clerical errors as can be seen by referring to the Druckexemplar text (the official text, attached to the Request as Annex 3) which contains amendments in manuscript. The errors are not serious but I shall refer to the correct version of claim 1 which is as follows:

1. *A hand-held apparatus for inserting protrusion members from a storage reservoir into pre-drilled holes in a sign or identification product face to create raised elements of Braille lettering on the sign or identification product face, **characterized in that the apparatus comprises:***

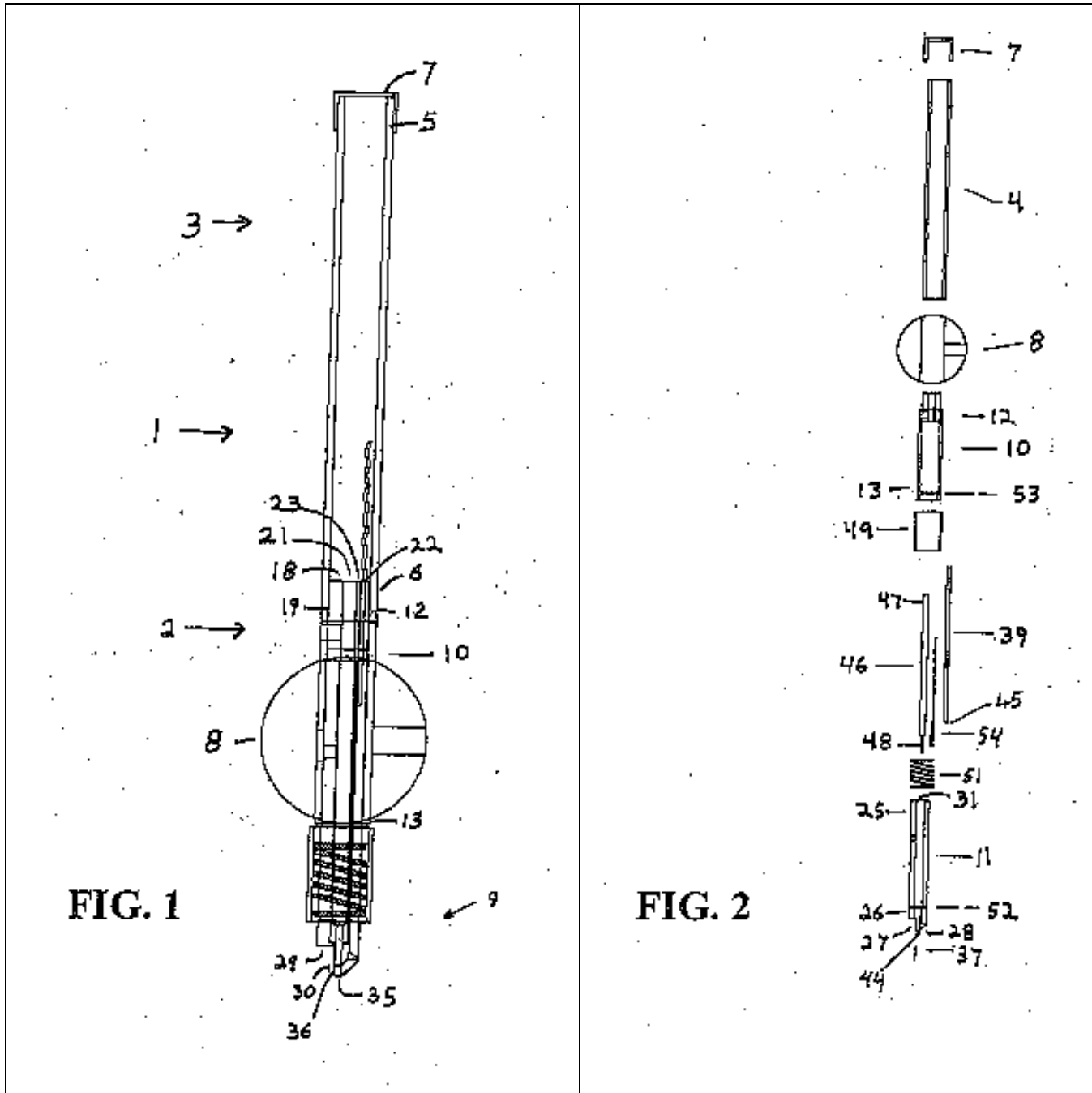
a delivery means (23,54) for delivering the protrusion members from the storage reservoir (4), down a delivery channel (39) to a delivery nozzle (26);

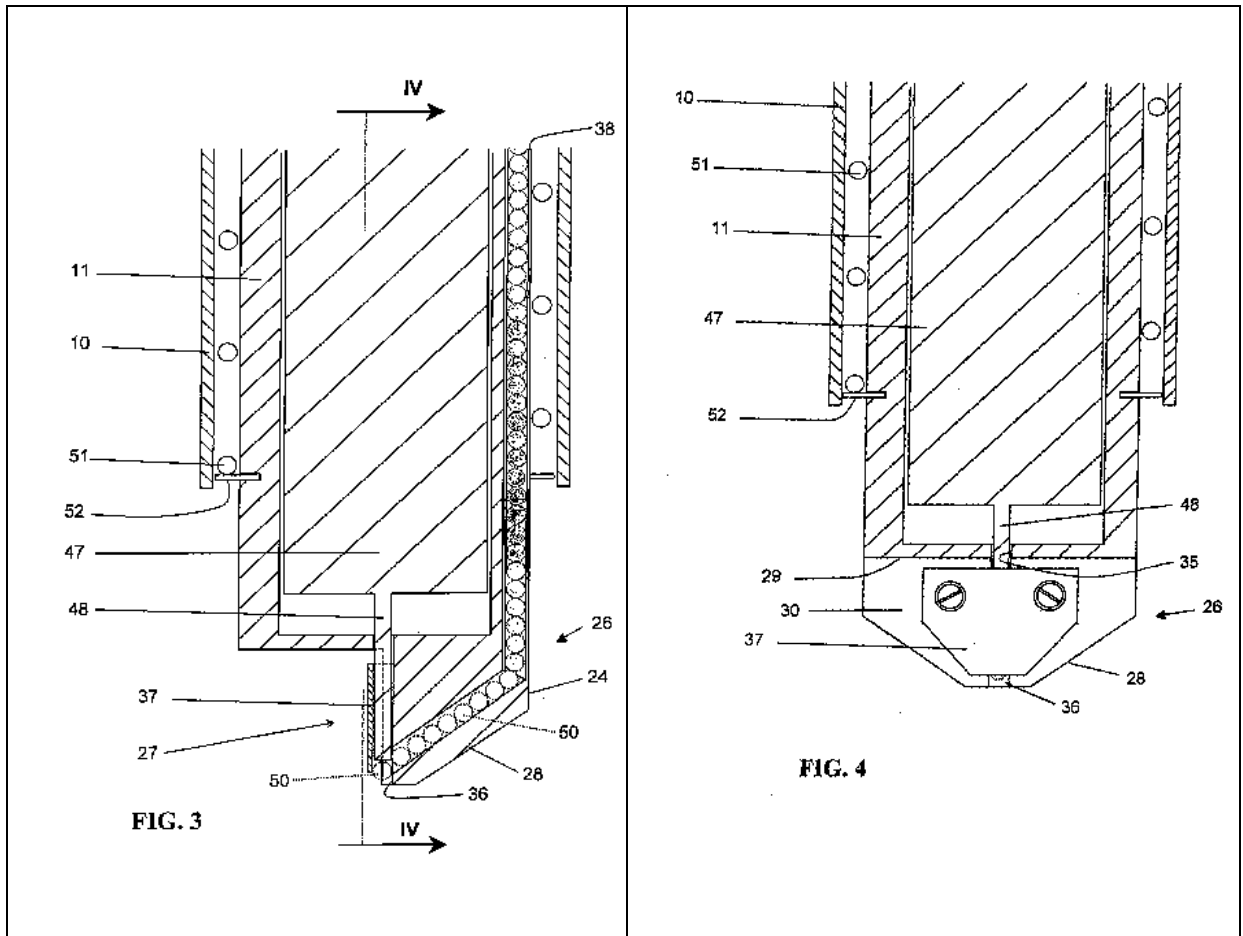
presentation means (44) including a spring clip (37) for presenting the protrusion members one at a time to a delivery location in the delivery nozzle (26);

an axial pressure pin (46) aligned with the delivery location; and

means (8) for depressing the axial pressure pin (46) relative to the delivery nozzle (26) to push the protrusion members one at a time from the delivery location in the delivery nozzle (26) past the spring clip (37) and to press them into the pre-drilled holes.

7. The drawings of the Patent are reproduced below:





The Braille-Oz product

8. The Request includes (a) six drawings (Annex 2) showing the Braille-Oz product, the most useful two of which are reproduced below, and (b) a description of the product with reference to the drawings (paragraphs 12-15 of the Request). The reference numbers have been added by the Requester so that numbers less than 100 are intended to indicate parts equivalent to those in the drawings of the Patent.

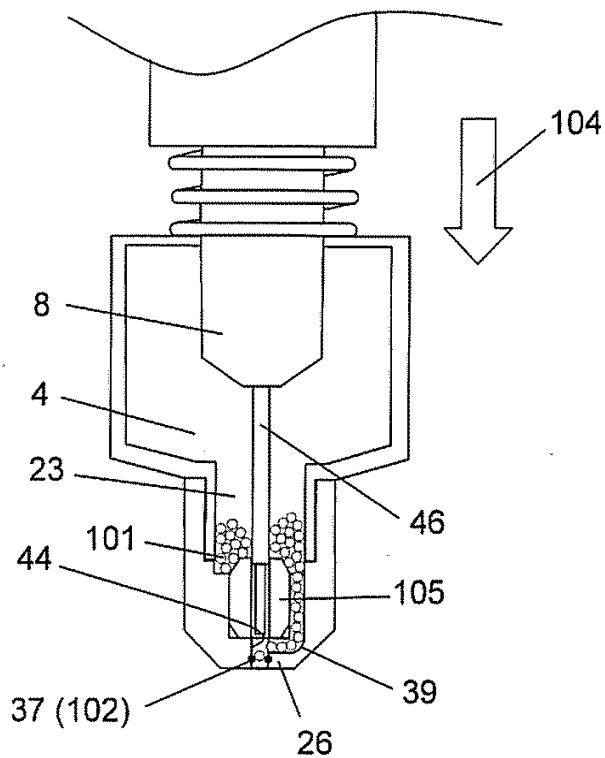


Figure 4

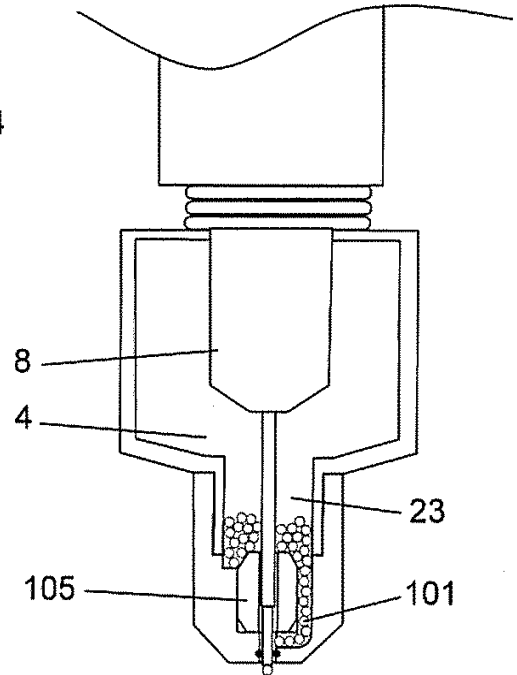


Figure 5

9. The Braille-Oz insertion tool in question is described in the Request as comprising (and here I summarise) a bead reservoir 4 having in its base a central aperture 23 leading to a delivery conduit 39 formed in a delivery nozzle 26. Beads 101 pass singly from the delivery channel 39 into a bore 44 where they are retained by a rubber O-ring 102. An axial pressure pin 46 is depressed by a plunger 8 to push the beads 101 one at a time from the delivery nozzle 26 through the O-ring 102 and to press them into the appropriate pre-drilled holes.

Discussion

10. I shall go methodically through (the correct version of) claim 1 of the Patent, which divides naturally into five clauses, to see to what extent the Braille-Oz insertion tool, insofar as it is shown and described in the Request, satisfies the requirements of the claim. In construing the claim I shall follow the authority of Hoffman LJ in *Kirin-Amgen and others v Hoechst Marion Roussel Limited and others* [2005] RPC 9 by which I must put a purposive

construction on claim 1, interpret it in the light of the description and drawings as instructed by section 125(1) and take account of the Protocol to Article 69 of the EPC. To put it simply, I must decide what a notional person skilled in the art would have understood the patentee to have used the language of the claim to mean.¹ I consider that the notional person skilled in the art for the purposes of this Opinion is one who would have working knowledge of Braille signs and the equipment used to make them in addition to his or her ordinary workshop skills and general knowledge.

11. Considering the opening clause of claim 1, there is no doubt that the Braille-Oz tool is “*apparatus for inserting protrusion members from a storage reservoir into pre-drilled holes in a sign or identification product face to create raised elements of Braille lettering on the sign or identification product face*” but is the apparatus “*hand-held*” as required by the very first words of the claim?. The Request does not specifically say how the Braille-Oz tool is held during use but the shape of the apparatus depicted in the drawings in Annex 2 does not suggest to me that it was intended to be hand-held.

12. I consider that the skilled person would have understood the Patentee to have used the phrase “hand-held” to mean that the apparatus must be intended to be, or at the very least suitable for being, held by the hand in use, possibly for lengthy periods of use, not merely capable of being held by a human hand. I believe that the skilled person would have been of this view even without reading the title and the introductory paragraphs 1-5, which are concerned only with hand-held apparatus and include the statement that the apparatus has the “general shape of a pen” (paragraph 1), but those introductory paragraphs would only have reinforced his or her view.

¹ The Protocol on the Interpretation of Article 69 of the EPC 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”.

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.”

Section 125(3) of the Act states that:

“The Protocol on the Interpretation of Article 69 of the European Patent Convention (which Article contains a provision corresponding to subsection (1) above) shall, as for the time being in force, apply for the purposes of subsection (1) above as it applies for the purposes of that Article.”

13. Thus I disagree with the statement in paragraph 8 of the Request that, referring to the specification of the apparatus in the Patent as “hand-held”, “*It is submitted that that can only mean that it is made to a size and shape that enables the apparatus to be picked up in the hand of a typical user. It is immaterial whether the apparatus is held in the hand or in a holder in use.*” Following the latter line of reasoning would, it seems to me, lead to a tool designed specifically to be mounted in a machine being able to be described as “hand-held” provided only that it could be picked up manually; I do not think that the notional skilled person would consider that to be reasonable. However, I agree with what the Requester says later in the same paragraph: “*...the wording “hand-held apparatus” does not require that the apparatus should be incapable of being clamped to the working arm of a machine tool in use.*” The Request attempts to emphasise this point in paragraph 9 with reference to photographs (Annex 4) of a Braille sign bead dispenser specifically designed to be hand-held in use but also to be able to be clamped to a robot arm – and thus to show, the Requester tells me, the “*symbiotic relationship*” between a tool designed to be hand-held and one designed to be held by a robot - but, as far as I can tell from Annex 4, the clearly ergonomic handle of the apparatus is not used when machine-mounted so I do not find Annex 4 and the accompanying comments persuasive.

14. I note the statement in the observations (page 2, fourth paragraph) that “*whether any device is used as a hand-held device or as an attachment to a automated device is irrelevant for the purposes of determining infringement.*”; this seems to express agreement with the Requester on this important point. This matter is again taken up in paragraph 5.1 of the observations in reply which state: “*It is noted that the Respondents agree with our basic position (as set out in paragraph 8 of our Request) that the actual use of the device (whether it is held in the hand or in a robot arm during use) is **irrelevant** for the purposes of assessing patent infringement.*” I would observe that it may be true that the method of use of the Braille-Oz tool is strictly irrelevant to the assessment of infringement of a claim directed to apparatus but the *suitability* of the tool for hand-held use must be relevant since claim 1 commences with just that requirement, one which cannot be overlooked.

15. To summarise my thoughts on the first clause of the claim, I find myself in disagreement with both the Requester and the observer by coming to the conclusion that it **is** relevant to the issue of infringement whether or not the Braille-Oz tool is intended to be hand-held. However, the papers in front of me do not tell me that the Braille-Oz tool is hand-held but neither do they tell me explicitly that it is not. On balance, the comments and drawings available suggest to me that the Braille-Oz tool is not hand-held, in which case the Braille-Oz tool would not infringe.

16. Turning now to the second clause of claim 1, it is clear that the Braille-Oz

tool has “a delivery means for delivering the protrusion members from the storage reservoir, down a delivery channel to a delivery nozzle”.

17. The third clause of claim 1 requires “*presentation means (44) including a spring clip (37) for presenting the protrusion members one at a time to a delivery location in the delivery nozzle (26)*”. Paragraph 12 of the Patent says: “*A spring clip for presenting the protrusion members one at a time to a delivery location in the delivery nozzle 26 and holding them there until needed comprises a plate spring 37 is (sic) fixedly attached to the front face 30 by screws as shown in FIG. 4.*”

18. The observations state (page 2, third paragraph) that “...*there is no description of the form of the spring clip, as to whether it is resiliently deflected axially or radially. We observe that it does not function to introduce a single ball into position for insertion, but rather prevents the balls from falling out of the nozzle.*” I disagree, since the form and function of the spring clip are clear enough from the drawings and while it is true that it prevents the balls from falling out of the nozzle it also serves to hold the lowermost ball in the correct position relative to the pressure pin. Paragraph 4.2 of the observations in reply contains a detailed account of the action of the spring clip 37.

19. The Braille-Oz tool has resilient means – in the form of a rubber O-ring (102) - for presenting the protrusion members one at a time to a delivery location in the delivery nozzle. The O-ring 102 functions in an analogous manner to the plate spring 37 of the Patent since the O-ring will in its relaxed state prevent the passage of a bead but, forced by the pressure pin (46), the O-ring distorts elastically to allow a bead to pass. The observations include the comment that “...*the patentee has not accurately described the function of the o-ring*” but I cannot see there are good grounds for that view. The question that faces me is whether the O-ring 102 of the Braille-Oz tool is a “spring clip” as meant by the Patent.

20. Again following the *Kirin-Amgen* approach set out above, I must decide what the skilled person would have understood the patentee to have used the term “spring clip” in claim 1 to mean. The word “clip” in ordinary language has been defined for example as:

“*a device for gripping, clasping, fastening or holding things together*”
(The Chambers Dictionary, 11th edition);

“*any of various devices that grip, clasp, or hook*” (Merriam-Webster online);

“*a small usually metal or plastic object used for fastening things together or holding them in position*” (Cambridge Advanced Learner's Dictionary), and

“something which clips or grasps; a device for attaching one object to another” (Wiktionary).

21. Thus the term “spring clip” in ordinary usage would be thought of as a device consisting of a spring, or comprising a spring, for gripping, holding things together or in position, or attaching one object to another. I would add that a “spring clip” would probably be thought of as being a simple device.

22. The “spring clip” of the embodiment in the Patent is a blade spring 37 which does not, as can be seen from figures 3 and 4 of the Patent, grip anything nor does it hold things together but rather it holds the beads back, somewhat in the manner of a valve member, with the lowermost one in a correct position to be acted upon by the pin 48. The fact that the blade spring holds thing(s) in position, albeit not by urging them against anything as would normally be expected of a “clip”, suggests to me that the term “spring clip” is being used with a meaning that is distanced somewhat from that in general usage.

23. While appreciating that the “spring clip” of claim 1 is a resilient device able to restrain in the delivery channel the next bead to be delivered but also able to be overcome by the force of pressure pin when it moves to deliver that bead, I do not think that the skilled person would think of **any** resilient device when trying to work out what was meant by the term “spring clip” but rather only one which is something like a “clip”. Since there are so many different kinds of clips and, as I have said, the term “clip” seems not to be quite appropriate in the Patent, it is impossible to draw exact boundaries around the meaning that the skilled person is likely to give to the term “spring clip” but I believe that a rubber O-ring is very likely to be excluded because it so unlike the spring clips that the skilled person is likely to have encountered and so unlike the spring clip in the Patent..

24. On balance, therefore, I consider that the Braille-Oz tool does not satisfy the third clause of claim 1.

25. The penultimate clause of the claim requires *“an axial pressure pin aligned with the delivery location”* which is clearly satisfied by the Braille-Oz tool as shown and described in the Request.

26. Finally, claim 1 requires *“means (8) for depressing the axial pressure pin (46) relative to the delivery nozzle (26) to push the protrusion members one at a time from the delivery location in the delivery nozzle (26) past the spring clip (37) and to press them into the pre-drilled holes”*. This part of the claims is only what would be expected from the preceding parts and, subject to any doubt concerning the “spring clip” feature, the Braille-Oz tool also satisfies this part of claim 1.

Opinion

27. I consider that the Braille-Oz tool, insofar as it has been described in the papers in front of me, does not have all the features set out in claim 1 of the Patent because it does not appear to be a “hand-held apparatus” and does not have a “spring clip” for presenting the protrusion members. It follows that I do not consider that the Braille-Oz tool would infringe the Patent if were to be offered for sale in the United Kingdom. Given that claim 1 is not satisfied by the Braille-Oz tool I need not consider the appendant claims in this Opinion.

Application for review

28. 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.

John Twin
Examiner