OPINION UNDER SECTION 74A

| Patent | GB2423145 |
|-----------------------|--------------------|
| Proprietor(s) | Tim Jarvis |
| Exclusive Licensee | n/a |
| Requester | Ticknall Solar Ltd |
| Observer(s) | n/a |
| Date Opinion issued | 16 August 2016 |

The request

1. The comptroller has been requested to issue an opinion as to whether a proposed new Belisha beacon infringes claim 1 of patent number GB 2423145 ("the patent").

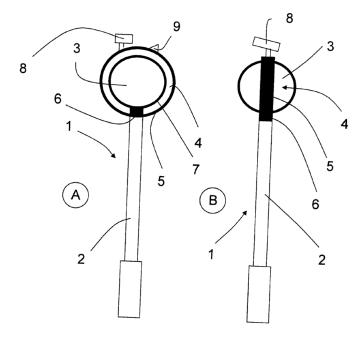
Observations

2. Observations were received from Nash Matthews on behalf of the proprietor and observations in reply were received from Swindell & Pearson.

The patent

- 3. Entitled "Lighting collar and other improved lighting units", the patent was filed on 15 February 2005, published on 16 August 2006 and granted with effect from 17 October 2007. It remains in force.
- 4. The patent is concerned with lighting units particularly for illuminating pedestrian crossings. Several such lighting arrangements are illustrated and described, although only figures 1 and 2 are said to embody the invention in the section of the granted patent entitled "Brief Description of the Figures". I take it that the writer's intention was to indicate that the remaining figures do not embody the invention. I note that in the corresponding section of the application as filed the figures are all clearly said to show embodiments of the invention. Having considered figures 3 to 9 I do not feel that they embody the invention claimed.
- 5. In figures 1 and 2, below, a pedestrian crossing sign 1 is shown, having a post 2 and a globe 3. To that globe a collar 4 is fitted, the collar being in the shape of a ring and

having an opaque outer layer 5 and an optional high friction layer on its inner diameter 7 (I think perhaps circumference was intended here, although the meaning is clear). A camera or motion detector 8 and a light detector 9 may be provided. Light detector 9 may allow the unit to light up only when it is dark or to adopt a brighter setting in bright lighting conditions. When a vehicle is detected by the motion detector 8 the unit may be caused to flash, increase the frequency of flashing or increase in brightness. A number of lighting sources 10 such as light emitting diodes are provided within the collar 4. These are described as being oriented "in a 'face on' direction", contrasting with opaque layer 5 which prevents the emission of light in a sideways direction. The lighting sources may be spread across "the entire diameter of the collar" or only across a portion, for example half or three quarters of the collar. The lighting sources 10 may also be located on one or both 'face on' sides of the collar.



FIGURES 1

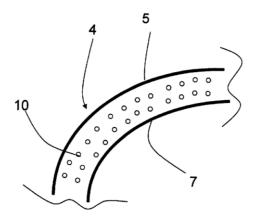


FIGURE 2

Claim construction

- 6. Before considering the documents put forward in the request I will need to construe the claims of the patent following the well known authority on claim construction which is *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) 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.
- 7. 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.

8. 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.

- 9. There is a single independent claim, as follows:
 - "A beacon lighting unit suitable for use in a pedestrian road crossing area as part of a pedestrian crossing road sign, comprising a light source located in a globe for illuminating a pedestrian crossing area; characterised in that the lighting unit further comprises a ring-shaped member located around said globe which incorporates both a further light source illuminating, in use, "face on" towards approaching vehicle traffic and an integral opaque region blocking, in use, emitted light in a lateral direction of said road."
- 10. The request and observations all offer views on the interpretation of "ring-shaped". The request takes "ring shaped" to mean circular on the basis that this is the ordinary meaning of the term and that it is consistent with the embodiments shown in the patent. I would also say that ring implies to me encircling or surrounding and thus an annular body rather than a disc. This is also consistent with the embodiment of

figures 1 and 2 in the patent. Also the "ring-shaped member" being "located around said globe" suggests to me a component separate or separable from the globe, albeit assembled with the globe, and surrounding the globe rather than incorporated within it.

11. The integral opaque region is also discussed in the request and the observations. I agree with the construction that the request and the observations from the patentee both place on the term integral, namely that the opaque region must form a single component with the ring-shaped member, rather than being assembled from separate components. In the observations in reply the requester shifts ground slightly to suggest that "the integral opaque region is integral with the light source.". I do not interpret the wording of the claim to mean this: I take "a ring-shaped member ... which incorporates both a further light source ... and an integral opaque region" to mean that the only connection required between the further light source and the integral opaque region is that they are both incorporated in the ring-shaped member.

Infringement

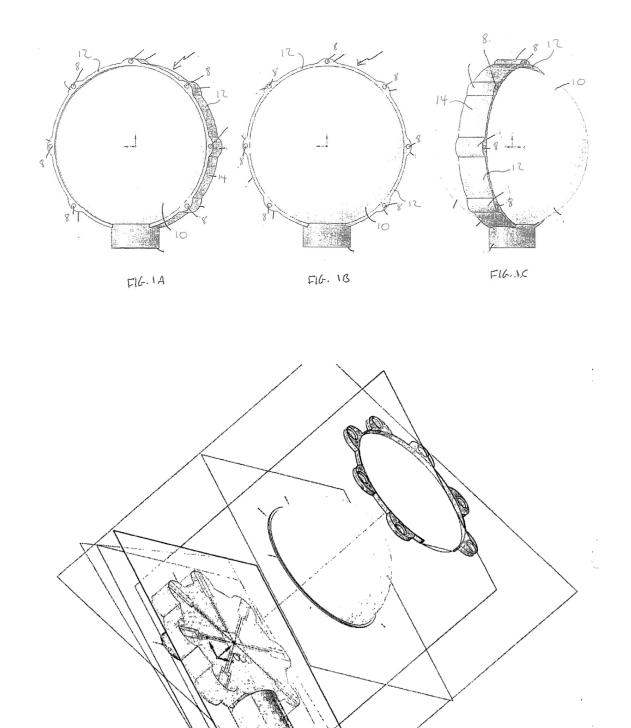
12. Section 60 Patents Act 1977 governs what constitutes infringement of a patent; the relevant part of Section 60(1) reads:

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;
- 13. Since an opinion is sought on potential infringement I shall assume that the conditions of Section 60(1)(a) would be met and that the question relates only to whether the proposed Belisha beacon falls within the scope of claim 1 of the patent.

The potentially infringing article

- 14. A number of figures are provided with the opinion request illustrating the potentially infringing product, see below. I have reproduced figures 1A to 1C from the observations rather than the request simply because these have been annotated with reference numerals.
- 15. In the request the product is described as a Belisha beacon which comprises a plurality of protrusions, each of which protrusions comprise a plurality of LEDs. The protrusions are said to form projections which stick outwards from the great circle of the globe. I take it from this that there is indeed a globe, although only one hemisphere is clearly illustrated. It is also said that these protrusions may be connected to a casing which interconnects them. This implies that the casing is optional, although I assume that it is present in the figures. The protrusions and light sources are also described as being fitted in a casing forming a separate component. I assume that this is the same casing that can interconnect the protrusions, although this is not entirely clear.



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16. From the exploded view of figure 2, above, it seems that the beacon is made up of a central member with opposed flat faces and a number of integral projections or protrusions extending from its perimeter. To one face of the central member is

secured a hemisphere and a second member with a number of projections or protrusions extending from its perimeter, the projections corresponding to those of the central member. Unlike the central member, the second member is open at its centre, providing clearance to pass over the hemisphere. The second member also appears to be discontinuous with a gap corresponding to the location of a socket attached to the central member. Whilst it is not shown, I assume that a further hemisphere and a further second member would be secured to the opposite face of the central member. Each of the protrusions includes a feature radiating from the centre of the central member. I take it that these are LEDs. It is not apparent from the figures or the request whether any part of the beacon is opaque. The observations on behalf of the patentee identify an opaque region (14 in figure 1A to 1C above). The observations in reply do not dispute this, nor do they explicitly agree. It seems reasonable to suppose that the outer periphery of the central member is opaque, although I realise there is limited information on which to base this conclusion. I should emphasise that this is all largely my interpretation of figure 2, since it is not described extensively in the request or the observations in reply.

In the language of the independent claim, the product is a beacon lighting unit suitable for use in a pedestrian road crossing area as part of a pedestrian crossing road sign. Although it is not clearly shown, it seems to be common ground between the requester and the patentee that the lighting unit comprises a light source located in a globe for illuminating a pedestrian crossing area. The request argues that the product lacks both a "ring-shaped member incorporating a further light source" and an "integral opaque region". The argument is that the protrusions around the periphery of the second member preclude it from forming a ring-shaped, i.e. circular, member and that the outer layer formed by a casing is not integral and therefore cannot form an "integral opaque region". The observations dispute this, arguing that the central member is indeed circular, despite including protrusions or deviations from the circular shape, and that there is clearly an integral opaque region (reference 14 in figures 1A to 1C). For my part, I do not feel that the central member constitutes "a ring-shaped member located around said globe" for the reasons that it does not encircle or surround the globe, but rather has a solid central region located within the globe. However, I do feel that the central member incorporates "both a further light source illuminating, in use, "face on" towards approaching vehicle traffic and an integral opaque region blocking, in use, emitted light in a lateral direction of said road.".

Opinion

18. It is my opinion that the proposed new Belisha beacon would not infringe claim 1 of the patent.

Application for review

19. 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.

| Karl Whitfield | | |
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| Examiner | | |
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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.