



PATENTS ACT 1977

APPLICANT	Barbara Crossley
ISSUE	Whether GB1309217.6 complies with section 3 and section 1(2)
HEARING OFFICER	Ben Micklewright

DECISION

Introduction

- 1 UK patent application GB1309217.6 was filed on 22 May 2013 in the name of Barbara Crossley with no priority declaration. It was published as GB 2514382 A on 26 November 2014.
- 2 The examiner argued that the invention lacks an inventive step and is excluded from patentability as relating to the presentation of information as such. After several rounds of correspondence, the matter was referred to me for a decision on the papers on file.

The invention

- 3 The application relates to signalling methods and devices used by a road vehicle. In order to allow other road users to distinguish between an intention to turn and an intention to overtake another vehicle, additional signalling lights are added to the vehicle. These may be steady, "winking" or flashing. The claims specifically restrict the colour of the lights to violet. These additional lights are used to signal the intention to overtake. The conventional directional signalling lamps are then used solely for signalling the intention to turn.
- 4 There is a single independent claim in the application, which has not been amended. This reads as follows:

Violet coloured single-purpose [sic] overtaking/passing vehicle lights constitute an advancement in road management by fascilitating [sic] easier, faster and safer traffic flow due to precision signalling
- 5 Although there are issues with the clarity of the claim, the intention of the application as a whole is clear. As such, the invention has been taken to be the use of violet

lights to signal an intention to overtake another vehicle, the lights not being used for any other purpose.

The law

6 Section 1(1) of the Patents Act 1977 states that

1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say –

...

(b) it involves an inventive step;

...

(d) the grant of a patent for it is not excluded by subsections (2) and (3) or section 4A below;

7 Section 3 then goes on to explain what is meant by an inventive step.

3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above.

8 Section 2(2) explains what is meant by the state of the art for the purposes of inventive step.

2(2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.

9 As such, a patent cannot be granted if the claimed invention is obvious in the light of any document which was made available to the public before the priority date of the invention. As no claim to priority has been made for the current application, the priority date of the invention is the filing date of the application.

10 Section 1(2) lists certain types of things, which are not considered to be inventions. These are conventionally known as excluded subject matter:

1(2) It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of -

...

(d) the presentation of information;

but the foregoing provision shall prevent anything from being treated as an invention for the purposes of this Act only to the extent that a patent or application for a patent relates to that thing as such.

Inventive step

- 11 In order to determine whether an invention involves an inventive step, the courts have used the approach outlined in *Windsurfing*¹ and refined in *Pozzoli*². This approach has the following steps:
- (1) (a) *Identify the notional “person skilled in the art”;*
(b) *Identify the relevant common general knowledge of that person;*
 - (2) *Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;*
 - (3) *Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed;*
 - (4) *Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?*
- 12 This approach can be applied to the invention in the current application as follows:
- Identify the notional “person skilled in the art” and identify the relevant common general knowledge of that person*
- 13 The person skilled in the art is the designer of external lighting systems for vehicles. Such a person would be familiar with the different light arrangements on road vehicles. In particular, the skilled person would be aware of the use of turn indicators, along with brake lights, head lights and reversing lights. They would also be familiar with other signalling lights such as various flashing roof lights and the use of direction indicators as a hazard warning.
- 14 The person skilled in the art would also be aware of the need to distinguish different signals in different circumstances on the road, for example to distinguish a braking event from a turning event. In particular, they would know how to make different types of signalling lamp appear distinctive by the use of colour or flashing.
- Identify the inventive concept of the claim in question or if that cannot readily be done, construe it*
- 15 As indicated in paragraph 5 above, the invention is the use of violet lights to signal an intention to overtake another vehicle, the lights not being used for any other purpose.

¹ *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd* [1985] RPC 59

² *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588

Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed

- 16 Chinese utility model CN 2431162Y (YI DINGJIE) discloses a signal indicator for a motor vehicle. This document discloses a lamp array containing two separate lamps, as depicted in figure 1. The first lamp is used for indicating an intention to turn. The second lamp is used to indicate an intention to overtake or pass. The lamp arrays are mounted on a vehicle, replacing the conventional direction indicators to provide separate turn and overtaking indications using dedicated lamps.
- 17 This document does not give any indication as to the colour of the lamps. As such, the only difference between the system described in this document and the invention in the application is that the application specifies that the overtaking lamps should be violet.
- 18 Other documents have been cited by the examiner during the prosecution of the examiner. For example CN2437536Y and NZ227315 were cited in the most recent examination report dated 15 January 2018. These both relate to overtaking or passing lights but the details are further removed from the inventive concept identified above than those of CN 2431162Y. For example CN2437536Y does not clearly disclose that the lamp is a single purpose lamp and NZ227315 relates to a light in the sun visor, typically used to light up some text such as “OVERTAKING” or “PASSING”. I will not consider them further in this decision given the greater relevance of CN2431162Y to the inventive concept identified above.

Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

- 19 When implementing the system described in CN 2431162Y, the skilled person would realise the necessity to make the overtaking lamp distinct from the other lamps on the vehicle, particularly at night or in poor visibility. The use of a light of a distinctive colour would be an obvious choice to ensure that the overtaking indicator is distinguishable from the other lamps, particularly the turning indicator. Given the presence of red, yellow and white lights on vehicles, violet would be an obvious choice to try, as it is distinct from the colours currently in use. As such, the invention in the current application lacks an inventive step in the light of this document.

Excluded subject matter

- 20 In *Aerotel*³, the Court of Appeal set out a four step process for determining whether a claimed invention is excluded under section 1(2) of the Act. The steps are as follow:

- (1) *construe the claim;*
- (2) *identify the actual (or alleged) contribution;*
- (3) *ask whether it falls solely within the excluded subject matter;*
- (4) *check whether the actual or alleged contribution is actually technical in nature.*

³ *Aerotel Ltd v Telco Holdings Ltd and Macrossan’s Application* [2006] EWCA Civ 1371

21 This can be applied to the invention in the application as follows:

Construe the claim

22 As indicated in paragraph 5 above, the invention is the use of violet lights to signal an intention to overtake another vehicle, the lights not being used for any other purpose.

Identify the actual (or alleged) contribution

23 In *Aerotel* the Court of Appeal provided useful guidance in relation to determining the contribution. In paragraph 43 of this judgment Jacob LJ said:

“The second step – identify the contribution - is said to be more problematical. How do you assess the contribution? Mr Birss submits the test is workable – it is an exercise in judgment probably involving the problem said to be solved, how the invention works, what its advantages are. What has the inventor really added to human knowledge perhaps best sums up the exercise. The formulation involves looking at substance not form – which is surely what the legislator intended.”

24 The contribution must be considered as a whole. In substance what the inventor has added is a single-purpose overtaking/passing vehicle light which is coloured violet. The advantage is that it allows road users to distinguish between when a vehicle is intending to turn and when it is intending to overtake or pass another vehicle. The use of a violet colour for the light is significant in that it is the only feature which distinguishes the contribution from the prior art identified above.

Ask whether it falls solely within the excluded subject matter

25 The contribution, including its advantages, is entirely about presenting information to road users, namely information relating to whether a vehicle is intending to pass or overtake. It achieves these advantages by presenting to road users a violet light, the light being used only for this purpose.

26 The choice of a particular colour light to convey a particular piece of information relates solely to how the information is presented. As such, the application falls solely within excluded subject matter.

Check whether the actual or alleged contribution is actually technical in nature

27 I cannot identify any technical contribution in selecting a violet lamp as an overtaking indicator lamp. Neither is there a technical problem that the use of a violet lamp is addressing. I therefore conclude that the invention is excluded from patentability as being the presentation of information as such.

Conclusion

28 I find that the invention described in the application lacks an inventive step. I also find that the contribution made by the invention is excluded as being solely related to the presentation of information as such.

29 I have read the specification carefully and I can see nothing that could be reasonably expected to form the basis of a valid claim. I therefore refuse the application under section 18(3).

Appeal

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

Ben Micklewright

Deputy Director, acting for the Comptroller