

# Kluwer Patent Blog

## Philip Morris v Nicoventures – e-cigarettes light up the doctrine of equivalents and Arrow declarations

Chloe Dickson (Bristows) · Tuesday, November 14th, 2023

On 25 October 2023, HHJ Hacon (sitting as a High Court Judge), rendered his [judgment](#) in Philip Morris v Nicoventures[1]. The Claimants (“**PMI**”) sought revocation of EP (UK) No. 3 367 830 B1 (“**EP 830**”) and the defendants (“**BAT**”) counterclaimed for infringement. EP 830 was held to be invalid for lack of inventive step and not infringed by PMI’s IQOS ILUMA product. Further, a conditional amendment proposed by BAT would not have cured the invalidity. Of particular interest is the judge’s assessment of BAT’s allegations of infringement under the doctrine of equivalents and PMI’s claim for an *Arrow* declaration.

On equivalence, and as discussed further below, the Court applied the “disclaimed not claimed” principle to find against the patentee – a reminder of the importance of this principle for those drafting patents. On the *Arrow* declaration, the Judge held that the requested declaration would not serve a “useful purpose”. Parties seeking an *Arrow* declaration in future may find it useful to refer to the principles identified by HHJ Hacon in this judgment on whether a declaration will serve a “useful purpose”. Applicants should also consider whether their evidence in support of an *Arrow* declaration sufficiently addresses the effect the patentee’s portfolio of applications is having in creating real and significant doubt and which is hampering commercial plans. Further, applicants should consider whether they can properly demonstrate the positive impact a declaration would have, if granted.

### The patent

EP 830 concerned “heat not burn” or “HNB” technology used in e-cigarettes to vaporise nicotine without burning tobacco, allowing users to inhale a nicotine-containing aerosol, and not smoke. The patent was directed to a particular method of heating which, unlike the marketed devices at the priority date, used inductive heating.

The invention made use of a feature of materials with permanent magnetic properties known as the Curie point. The Curie point is the temperature above which a material will lose its permanent magnetic properties and become paramagnetic. The maximum temperature of a material heated using an oscillating magnetic field can therefore be self-regulated by its Curie point and a heating material could therefore be selected whose Curie point was below the combustion temperature of the smokable material of the e-cigarette.

### Construction

BAT had conceded that PMI's IQOS ILUMA system did not infringe the claims of EP 830 on a normal construction because the arrangement of the heater and consumable containing tobacco differed. In the IQOS ILUMA, the heater system was part of the consumable, rather than in the apparatus that accommodates it. However, a further difference identified in the judgment is whether the system infringed the claim feature "*a maximum temperature to which the heater is heatable by penetration with the varying magnetic field in use is exclusively determined by a Curie point temperature of the heating material*". HHJ Hacon construed "exclusively determined" to mean that there must at all times be a fixed relationship between a Curie point of the heater material and the maximum temperature of the heater. He further held that a relationship between the two where the maximum temperature of the heater at any time is at least in part determined by one or more factors other than a Curie point of the heater material, will not comply with the claim on a normal construction. The IQOS ILUMA also did not embody this feature, for reasons described in a confidential annex to the judgment.

### **The inventive concept of EP 830**

A key difference between the parties as to the identity of the inventive concept was whether the temperature of the heating material could be limited by any means other than the Curie point. The judge held that the inventive concept of the patent was "*An HNB system in which (i) an article containing smokeable material is inserted into the heating zone of a heating apparatus, (ii) the smokeable material is heated by inductive heating and (iii) the maximum temperature of the heater in the apparatus is exclusively determined (as construed above) by a Curie point of the heating material*".

As mentioned above, the IQOS ILUMA differed from the claim in two respects. The relevant features are both also reflected in the inventive concept such that the IQOS ILUMA differed from the inventive concept in that (a) the heater is in the consumable and (b) the maximum temperature of the heater is not at all times fixed by reference to a Curie point of the heating material, in that it depends in part on whether the system is calibrating. The judge considered these two differences collectively in determining whether PMI's product infringed as an equivalent (the approach he endorsed in *Regen v Estar*[2]) under the 3-step test set out in *Actavis v Eli Lilly*[3].

In relation to question 1, the judge considered that PMI's product achieved the same result as the invention, namely induction heating of smokeable material in an HNB system such that the smokeable material is heated sufficiently to volatilise nicotine and other compounds without burning the smokeable material. The IQOS ILUMA's use of the Curie point or having the heater in the consumable did not change the way in which this result was achieved. In reaching this conclusion, the judge also observed that a variant may work less well but still achieve exactly the same result in exactly the same way.

In relation to question 2, the judge found no reason why the skilled team at the priority date would have thought that the same result is not achieved in the same way by the variant.

BAT's case on infringement by equivalence fell down at the third question as a result of the "disclosed not claimed" principle, endorsed in *Akebia v Fibrogen*[4]. Briefly, the judge summarised the principle that where the patentee says in the description that the technical effect identified can be achieved either by means A or B but goes on to claim only means B, this is a clear indication from the patentee that means A does not fall within the scope of the claims, whether as a matter of normal construction or equivalence. The specification of EP 830 disclosed

and illustrated an HNB system in which the heater is in the consumable (as in the IQOS ILUMA). Whilst not identified as such, the judge held that the skilled person would have understood these examples to be comparative. On this basis, the skilled person would have understood strict compliance with this feature was intended and the IQOS ILUMA fell outside the scope of the claim.

### **Arrow declaration**

PMI sought Arrow declarations in respect of two families of patent applications pending before the EPO. BAT objected to the grant of the declaration on three grounds: (1) the declaration sought was unclear, (2) PMI sought to expand the scope of the declaration relating to lack of novelty to stretch beyond the bounds of the disclosure in the prior art, and (3) the declaration would not serve a useful purpose.

The judge dismissed the first two objections shortly. The clarity of the product description in dispute was “impermeable to air” and there was no good reason on the evidence to find that the skilled person would have any difficulty in understanding what it meant. In relation to the novelty objection, the judge noted that if the proposed declaration were drafted so that its effect would be to declare that the subject-matter of prior art was old as of the priority date, and no more, the application would be dismissed as pointless. He noted that it is to be expected that the subject-matter of the declaration is different.

From paragraph 183 of the judgment, HHJ Hacon reviewed the case law addressing whether a declaration serves a useful purpose and distilled twelve principles from these cases. Of particular relevance for the present case was that a declaration may be sought in relation to one or more features of a product or process, as opposed to a product or process in its entirety.

The judge then examined in further detail what *sort* of purpose is useful enough to warrant an Arrow declaration and added two further principles:

1. An Arrow declaration is likely to serve a useful purpose if the applicant can show that (a) the respondent’s portfolio of patent applications and/or patents creates real doubt, likely to continue for a significant period, as to whether technical subject-matter which the applicant wishes to exploit can lawfully be used, (b) the applicant’s reasonable intention to exploit that subject-matter would be of significant commercial advantage to it and (c) the declaration sought would, if granted, eliminate or significantly reduce the delay.

In this context “significant” means cumulatively sufficient to warrant the intervention of the court.

1. The court will more readily find that there is a useful purpose where the respondent’s behaviour has been consistent with an intent to prolong the doubt.

In applying these principles, the judge also noted that he would be reluctant to discourage parties from consenting to revocation of patents in suit where it is prudent to do so, as this saves court time and costs.

There was no conduct on the part of BAT in prosecuting the two patent families that was sufficient to mitigate in favour of granting the Arrow declaration. Furthermore, PMI had not pleaded clearly what would be the commercial goal achieved if the declaration was granted. It had said nothing about the effect of the declaration or its commercial value in relation to launch plans. An Arrow

declaration was therefore refused.

- [1] [2023] EWHC 2616 (Pat)
- [2] [2019] EWHC 63 (Pat)
- [3] [2017] UKSC 48
- [4] [2020] EWHC 866 (Pat)

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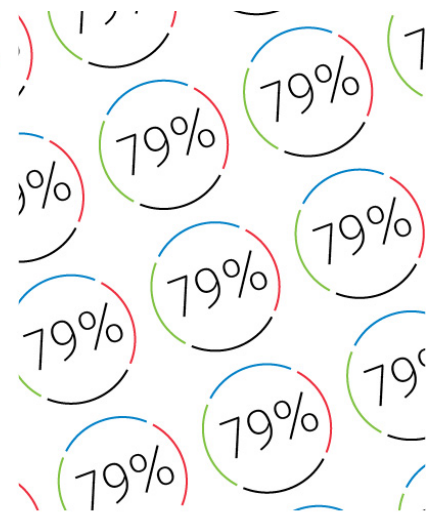
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This entry was posted on Tuesday, November 14th, 2023 at 1:18 pm and is filed under [literally fulfil all features of the claim](#). The purpose of the doctrine is to prevent an infringer from stealing the benefit of an invention by changing minor or insubstantial details while retaining the same

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functionality. Internationally, the criteria for determining equivalents vary. For example, German courts apply a three-step test known as Schneidmesser's questions. In the UK, the equivalence doctrine was most recently discussed in *Eli Lilly v Actavis UK* in July 2017. In the US, the function-way-result test is used.">Equivalents, Infringement, Patents, United Kingdom

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