

**EIP**

# Smoke Without Fire - British American Tobacco's "heat not burn" products found not to infringe two of Philip Morris International's patents

## **Nicoventures Trading Limited v Philip Morris Products SA & Anor [2023] EWHC 854 (Pat)**

Another judgment has recently been handed down in the ongoing global dispute between tobacco giants British American Tobacco ("BAT") and Philip Morris International ("PMI") over "heat not burn" alternatives to cigarettes. The judge has upheld the validity of two of PMI's patents but found that they were not infringed by BAT.

### Background

BAT and PMI are involved in litigation across the globe relating to heat not burn alternative tobacco products. Previous decisions in the UK have invalidated heat not burn patents owned by both BAT and PMI. In this trial BAT were seeking revocation of PMI's patents EP (UK) 3266323 ("EP'323") and EP 3741225 ("EP'225") and PMI were alleging that BAT's "glo" tobacco heating products infringed EP'323 but had dropped allegations of infringement in respect of EP'225. In parallel proceedings a German regional appeal court has recently ruled that BAT does not infringe the German designation of EP'323.

Heat not burn alternative tobacco products have been developed by tobacco companies

such as BAT or PMI to produce nicotine products which contain fewer of the unwanted by products contained in cigarette smoke. This is because the temperatures generated by heat not burn products are lower than those generated by conventional tobacco products such as cigarettes. Various technologies, based on either electrical or chemical heating, have been developed since the 1980s, however, the early products were not commercial successes.

### BAT's glo products

BAT's glo products are a variety of tobacco heating devices which are sold by BAT in the UK, whilst there are a variety of devices it was agreed between the parties that the differences between the devices did not matter. The glo products consist of various components but the point that mattered for this judgment is that the glo products have two independently controllable heating coils wrapped around a single steel tube which heats the tobacco.

### PMI's patents

PMI's patents covered heat not burn electronic devices containing various elements. The main element focussed on in this case was the requirement in the patents for two separate heating elements, which allows the nicotine product, to be heated at different times to generate an aerosol. This was said to be an advantage of the patents as there would be greater control of the heating of the nicotine and less need to reheat the aerosol generated. This would lead to a better experience as reheated aerosol is said to taste stale. The judge found that it was a part of the claims of the patents that the multiple heating elements act separately from each other so that different parts of the heating substrate could be heated to different temperatures. Given that heat will transfer through any device the question of whether two heating elements are really acting separately was found by the judge to be a question of fact and degree and that there was not necessarily a clear dividing line.

### Invalidity

BAT alleged that PMI's patents were invalid for both added matter and obviousness.

The judge first addresses the added matter allegations which were that claims in PMI's patents related to features from the patent's disclosure which were stripped of context and not generally applicable to the invention and thus added new information about the invention. BAT's argument was that as the patent application disclosed heat not burn devices with two or more heating elements which did not cover the entirety of the heated substrate, a claim requiring two or more elements that fully cover the entire heated

substrate was impermissible. The judge rejects this argument in short order as he finds that the patent application did disclose a system where the entire substrate was covered by two heating elements, albeit it permitted further heating elements to be inserted between the two heating elements.

The judge then later addresses BAT's argument that the patents were obvious over a patent application filed by a German company in 1998. This prior art was found by the judge to suggest that the way to improve heat not burn products over previous devices was to arrange the heating substrate as close as possible by the heat source by using a single conductive graphite loaded sheath within the nicotine substrate, rather than in the device. The judge then found that it was not obvious to move from a single heating element in the nicotine substrate itself to multiple different heating elements in the heat not burn device itself.

#### Infringement

The judge found that despite the device having two independently controllable heating coils, the single steel tube, which the heating coils were wrapped around, acted as a single heating element and so the glo products do not infringe EP'323 as the glo products do not have a "first heating element" and a "second heating element" as required by the claims. This decision by the judge is consistent with the approach of the German regional appeal court which found that EP'323 required two separate heating elements.

#### Takeaway point

The High Court and the German regional appeal court have both come to the same slightly counterintuitive conclusion that BMI's glo heat not burn tobacco products do not infringe PMI's patents as they do not have a first and second heating element as required by the patent despite containing two separate heating coils. This is a reminder, as the UK judge says, that in patent cases whether a device infringes is often "a matter of fact and degree", and that the components in any particular device may not neatly align with those in the claims of a patent.