

Central Division Paris Seat

DECISION

of the Court of First Instance of the Unified Patent Court
Central division (Paris seat)
issued on 27 November 2024
in the revocation action No. ACT_571565/2023
UPC CFI 308/2023

HEADNOTES:

- 1. The Unified Patent Court legal provisions introduce the so-called 'front loaded' procedural system whereby a claimant is required to concretely elaborate his arguments and evidence in its first written pleading. However, these provisions must be interpreted in the light of the principle of proportionality, which requires that the parties should not be burdened with tasks that are unnecessary to achieve the stated objective, and in the light of the principle of procedural efficiency, which is contrary to excessive and overly detailed allegations of facts and production of multiple documents in relation to matters that can be presumed to be known to the opposing party and not to be disputed by them.
- 2. In revocation actions, the claimant is required to specify in detail the grounds of invalidity that allegedly affect the contested patent, as well as the prior art documents relied upon to support any allegation of lack of novelty or inventive step. Consequently, the claimant cannot introduce new grounds of invalidity of the attacked patent or introduce new documents considered novelty destroying or convincing starting points for the assessment of lack of inventive step in subsequent written acts.
- 3. In certain situation, following the defence raised by the defendant, the claimant may allege new facts and new evidence, insofar as they are considered capable of supporting the main facts already timely alleged and disputed by the defendant or the probative value of the evidence already filed.
- 4. While it is in general questionable that a particular published patent application or a patent specification can be considered as an indication of common general knowledge, however the statement of the author of the patent that a teaching is widely spread at the time can used as evidence of the fact that this teaching forms part of common general knowledge.

KEYWORDS:

written procedure; validity of the patent.

CLAIMANT:

NJOY Netherlands B.V. - Westerdoksdjik 423, 1013BX Amsterdam, Netherlands

represented by Henrik Holzapfel, McDermott Will & Emery

DEFENDANT:

VMR Products LLC - 560 20th Street - California 94107 - San Francisco - US

represented by Bernhard Thum, Thum & Partner assisted by Jonas Weickert and Andreas Mötsch, Thum & Partner co-represented by Tobias Wuttke, Bardehle Pagenberg Partnerschaft mbB

PATENT AT ISSUE:

European patent n° EP 3 456 214

PANEL:

Panel 2:

Paolo Catallozzi Presiding judge and judge-rapporteur

Tatyana Zhilova Legally qualified judge
Max Tilmann Technically qualified judge

SUMMARY OF FACTS AND PARTIES' REQUESTS

- 1. On 14 September 2023, NJOY Netherlands B.V. filed a revocation action against VMR Products LLC before this Central Division, registered as No. ACT_571565/2023 UPC_CFI_308/2023, requesting that the patent at issue ('214) be revoked with effect to the territories of Austria, Belgium, Finland, France, Germany, Italy and Netherlands, as Contracting Member States in which the patent is in force, and that the defendant be ordered to bear the legal costs of the proceedings.
- 2. The patent at issue was filed on 14 March 2014 and published on 18 November 2020 and claims a priority of two patent applications of 12 November 2013 (US201361903344 P) and 10 February 2014 (US 201461937851 P). The patent was opposed, and the Opposition Division of the European Patent Office confirmed the maintenance of the patent with amendments. As a result, the patent was republished on 22 November 2023.

3. The patent relates to the fields of vaporizers, which may also be referred to as electronic cigarettes. Its independent claim 1 reads as follows:

"A vaporizer comprising:

- a shell (106) having a battery segment (102) and a cartomizer receiving segment (104), the cartomizer receiving segment defining a chamber (108) having an insertion end distal from the battery segment and a base end proximate to the battery segment;
- a cartomizer (200) insertable into the chamber at the insertion end, the cartomizer including:
- a cartomizer body (208) dimensioned to hold a vaporizable substance,
- a heating element (214) provided in or proximate to the cartomizer body operable to heat the vaporizable substance,
- cartomizer electrical contacts (218) provided on an exterior of the cartomizer,
- cartomizer electrical circuitry operable to direct an electrical current between the cartomizer electrical contacts and the heating element, and
- a mouthpiece (220) in fluid communication with the cartomizer body, the mouthpiece extending from the insertion end of the chamber when the cartomizer is inserted into the chamber,

wherein the heating element is activated by the electrical current and is operable to heat the vaporizable substance to a vaporization temperature;

- a battery (110) housed within the battery segment;
- battery electrical contacts provided between the base end of the chamber and the battery segment, the battery electrical contacts positioned to contact the cartomizer electrical contacts when the cartomizer is inserted into the chamber; and
- battery electrical circuitry housed within the battery segment and operable to direct an electrical current between the battery, the battery electrical contacts, the cartomizer electrical contacts, and the heating element, when the cartomizer is inserted into the chamber,

the shell including a window (130) provided at the cartomizer receiving segment (104) so that a portion of the chamber is visible from outside the shell."

- 4. In the statement of claim the claimant argues that the patent is not valid because of the lack of inventive step, assuming as starting point either U.S. Patent Application No. 2010/0242974 A1 ('Pan') and US-Patent Application No 2005/0268911 A1 ('Cross').
- 5. On 11 December 2023 the defendant lodged the (corrected) defence to revocation which included a conditional application to amend the patent based on 8 different amendments and consisting of 35 auxiliary requests. The defendant requested that: the revocation action be dismissed and the patent be maintained as granted; in the alternative, the patent be maintained based on one of the proposed amendments, further in the alternative in parts based on the independent validity of one or more of its dependent claims in combination with independent claim 1 as granted and yet further in the alternative in parts based on the independent validity of one or more of its dependent claims as granted in combination with claim 1 of the proposed amendments of the claims of the patent; the claimant bears the costs of the proceedings.
- 6. With its reply to defence to revocation, filed on 13 February 2024, the claimant also requested the Court to dismiss the defendant's alternative requests.

- 7. On 13 March 2024 the defendant lodged its rejoinder to claimant's reply requesting that exhibits MWE 17 to MWE 40 and document DE 20 2010 002 041 (MWE 42), submitted by the claimant with its reply, not be admitted into the proceedings.
- 8. On 15 April 2024 the claimant filed its rejoinder to the reply to the defence to the application to amend the patent requesting the Court to dismiss this latter defendant's request and to admit Exhibits MWE 17 to 46 to the proceedings, as well as the submission insofar as the submission was not limited to commenting on defendant's application to amend the patent.
- 9. On 2 May 2024 the defendant submitted its comments to this latter claimant's previous written pleadings confirming that its previous requests are maintained and, furthermore, requesting not to admit any of newly filed documents MWE 17 to MWE 46.
- 10. After the closure of the written procedure an interim conference was held on 7 May 2024 in which the judge-rapporteur took several decisions and, in particular, stated that the application to amend the patent was admissible with regard to the provision set by Rule 30 (1) (b) of the Rules of Procedure ('RoP'), the grounds of revocation not asserted in the statement for revocation, as well as any new facts and/or evidence submitted after the first writ that do not directly respond to arguments raised by the opposing party, shall be excluded from consideration and that the submission of comments to claimant's submissions of 15 April 2024 lodged by the defendant on 2 May 2024 shall also be excluded from consideration.
- 11. On 30 September 2024, in reaction to the invitation of the judge-rapporteur to examine the possibility of reducing the number of amendments to the patent, the defendant submitted an application reducing the number of auxiliary requests to 10.
- 12. Finally, the oral hearing was held on 16 October 2024.

GROUNDS FOR THE DECISION

Admissibility of late filed assertions and late filed evidentiary documents.

- 13. As previously mentioned, the claimant submitted new evidentiary documents (Exhibits MWE 17 to MWE 40 and MWE 42) with its reply to defence to revocation and the defendant objected to the admission of these documents, arguing that with the exception of documents MWE 32 and MWE 39 each of the newly filed documents could have already been submitted with the statement for revocation and that claimant's filing as well as all arguments relating to these documents constitute an amendment of the case which is not admissible as the claimant did not apply for leave to amend its case according to Rule 263 'RoP' and, in any case, the requirements for amending the case set forth by this Rule were not met.
- 14. The claimant contested that Rule 263 'RoP' deals with situations that have nothing to do with filing further documents in a reply to support a position in the statement for revocation, that the claimant is permitted to raise new arguments and submit further documents supporting its case in its reply according to Rule 51 'RoP' and that the claimant cannot possibly anticipate which points the defendant will dispute and needs to be proved.
- 15. By order issued pursuant to Rule 105 'RoP' on 12 June 2024 the judge-rapporteur stated that grounds of revocation not asserted in the statement for revocation, as well as any new facts

and/or evidence submitted after the first writ, that do not directly respond to arguments raised by the opposing party, shall be excluded from consideration. The panel agrees with the judge-rapporteur's statement and considers appropriate to give a more accurate reasoning on the issue.

- 16. Rule 44 'RoP' states that the statement for revocation shall contain "... (e) one or more grounds for revocation, which shall as far as possible be supported by arguments of law, and where appropriate an explanation of the claimant's proposed claim construction; (f) an indication of the facts relied on; (g) the evidence relied on, where available, and an indication of any further evidence which will be offered in support ...".
- 17. Similar requirements are requested in the statement of claim as Rule 13 'RoP' provides that this written pleading shall contain "an indication of the facts relied on" [lett. (I)], "the evidence relied on" [lett. (m)] and "the reasons why the facts relied on constitute an infringement of the patent claims, including arguments of law and where appropriate an explanation of the proposed claim interpretation" [lett. (n)].
- 18. In general, the parties are under an obligation to set out their full case as early as possible (Preamble 'RoP', para. 7, last sentence).
- 19. This legal framework introduces the so-called 'front loaded' procedural system whereby a claimant is required to concretely elaborate his arguments and evidence in its first written pleading (see, on this issue, Paris CD, decision issued on 29 July 2024, UPC_CFI_263/2023; Brussels LD, order issued on 8 July 2024, UPC_CFI_376/2023). The rationale behind these provisions is to ensure that the defendant is aware of the factual elements and grounds upon which the claim against him is based, as well as the evidence available to the claimant, thereby enabling him to prepare an adequate defence, and, at the same time, to expedite the proceedings. This is one of the primary objectives of the Court, which would be undermined if the claimant were permitted to gradually introduce new factual circumstances, new legal arguments, or new evidence into the proceedings.
- 20. However, these provisions must also be interpreted in the light of the principle of proportionality, as set out in the Preamble of the 'RoP', which requires that the parties should not be burdened with tasks that are unnecessary to achieve the stated objective. In this regard, it must be noted that Rule 44 'RoP' requires an "indication" of the facts relied on and this seems to support an interpretation of the relevant provisions contrary to an overly strict application of the 'front loaded' procedural system.
- 21. Furthermore, account must also be taken of the need, which is served by the principle of procedural efficiency, to avoid excessive and overly detailed allegations of facts and the production of multiple documents in relation to matters that can be presumed to be known to the opposing party and not to be disputed by them, provided that their allegation and evidence is preserved if challenged, thus considering the natural course of the procedural dynamics.
- 22. Moreover, an excessive and redundant allegation of facts and production of documents can also become an obstacle to the effective exercise of the right of defence, imposing on the opposing party a burdensome task of studying the claim and the evidence presented, and hindering the

- efficient functioning of the judicial response, by overburdening the Court with unnecessary activities.
- 23. Additionally, it can be argued that a document may be introduced into the proceedings at a later stage, if it was created or became available to the party during the proceedings, given the principle of fairness which protects a party that has acted in a diligent way.
- 24. It can therefore be stated that, in revocation actions, the claimant is required to specify in detail the grounds of invalidity that allegedly affect the contested patent, as well as the prior art documents relied upon to support any allegation of lack of novelty or inventive step. This defines the subject matter of the dispute and enables the defendant to understand the allegations made against it and to prepare an adequate defence, as well as allowing the Court to determine the scope of its jurisdiction in relation to the claim.
- 25. Consequently, the claimant cannot introduce new grounds of invalidity of the attacked patent or introduce new documents considered novelty destroying or convincing starting points for the assessment of lack of inventive step in subsequent written acts. This would result in a broadening or, in any case, a modification of the subject matter of the dispute, constituting an amendment of the case and falling within the scope of Rule 263 'RoP', which may only be permitted by the Court upon specific request and after demonstrating that the requirements of that Rule have been met.
- 26. Similarly, the claimant must specify in the statement of case the facts that it considers necessary to prove in order to succeed in its claim, together with the relevant evidence.
- 27. However, it should be noted that in certain situations, following the defence raised by the defendant, the claimant may need to allege new facts, insofar as they are considered capable of supporting the main facts already timely alleged and disputed by the defendant. In this case, the need to respond to the defendant's defence, the terms of which cannot be foreseen *ex ante* by the claimant, justifies the introduction of such new facts in the reply to defence to revocation.
- 28. Likewise, the need to produce new evidence may arise from the defendant's defence which disputes the facts alleged by the claimant or the probative value of the evidence already filed in Court.
- 29. This is consistent with the principles set by the Court of Appeal (decision issued on 21 November 2024, UPC_CoA_456/2024) according to which while the parties are required to set out their case as early as possible in the proceedings nevertheless specific new arguments may be admitted into the proceedings in consideration of specific circumstances of the case.
- 30. Applying these principles to the present case, it must be concluded that the documents introduced by the claimant in the reply to defence to revocation consisting of the declaration released by and of the documents referred to in that statement arguments regarding the common general knowledge and the claim construction which are intended to contrast and react to the arguments raised by defendant in its defence to revocation and the evidence opinion, filed in support of these latter arguments. The admissibility of these late filed documents shall also extend to arguments that, while not constituting a direct response to the defendant's arguments, are closely related to them.

- 31. In its rejoinder to the reply to the defence to the application to amend the patent the claimant did not limit to commenting on the defendant's application to amend the patent but illustrated some arguments in reaction to new points that the defendant's rejoinder had raised.
- 32. The defendant, then, lodged an application commenting this latter claimant's writ and argued that its comments were responsive to those arguments raised by the claimant which did not represent a rejoinder to the application to amend the patent.
- 33. In this regard, it should be recalled that where an application to amend the patent is filed, Rule 32 'RoP', as referred to in Rule 55 'RoP', allows the claimant to file a reasoned defence to the application to amend the patent; therefore, the patent proprietor may lodge a reply to the defence to the application to amend the patent and the defendant may lodge a rejoinder to the reply which shall be limited to the matters raised in the reply.
- 34. It is clear from the plain wording of the Rule, as well as from the overall structure of the written procedure, that the claimant cannot raise in its rejoinder arguments that were not previously raised in the reply. Accordingly, those portions of the claimant's response that do not address the arguments in the reply in particular, section B), C) and D) of the writ –, as well as Exhibit MWE 41 and 43 shall be disregarded.
- 35. The same conclusion must be reached with respect to the defendant's comments filed on 2 May 2024, as the Rules of Procedure do not provide for the defendant to lodge any further written submissions after having filed an application to amend the patent and, subsequently, a reply to the defence to the application to amend the patent.
- 36. Both parties have sought the admission of their latter writs under Rules 36 and 58 'RoP', which permit the further exchange of written pleadings. On this point, the Court notes that the discretionary power to allow the further exchange of written pleadings requires a reasoned request from a party, and neither party has submitted such a request.

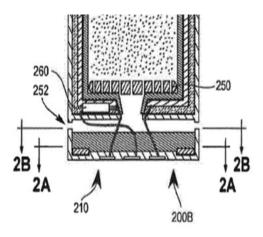
The patent at issue.

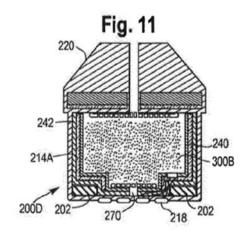
- 37. The patent at issue contains 14 claims in which claim 1 is an independent claim and claims 2 to 14 are dependent on claim 1. Claim 1 relates to a vaporizer (also referred to as electronic cigarette).
- 38. Electronic cigarettes have recently emerged as a new product for providing nicotine through a smokeless inhalation process. Typically, implementations consist of a power supply and an atomizing device. In reusable electronic cigarettes the two items are separated into a battery and a cartomizer, to allow the disposal and replacement of a nicotine containing fluid cartomizer while preserving the more costly battery and associated circuitry for additional use. In disposable electronic cigarettes, the two items are combined to integrate the functions into one unit that is discarded after either the battery energy or the nicotine containing liquid is exhausted (para. [0003]).
- 39. The electronic cigarette liquid used to vaporize ingredients such as nicotine is generally a solution of propylene glycol, vegetable glycerine, or polyethylene glycol 400, as well as their mixtures to which a flavour and/or nicotine has been added. The solution is often sold in a bottle (for refilling by the user) or in disposable cartridges or cartomizers. Many different flavours are

incorporated into these liquids, including those that resemble the taste of regular tobacco, menthol, vanilla, coffee, cola and/or various fruits. Various nicotine concentrations are also available, and nicotine-free solutions are also common (para. [0004]).

- 40. As suggested by the defendant claim 1 of the patent at issue may be structured as follows:
 - (1.1) A vaporizer comprising
 - (1.2) a shell having a battery segment and a cartomizer receiving segment
 - (1.2.1) the cartomizer receiving segment defining a chamber having an insertion end distal from the battery segment and a base end proximate to the battery segment
 - (1.3) a cartomizer insertable into the chamber at the insertion end, the cartomizer including:
 - (1.3.1) a cartomizer body dimensioned to hold a vaporizable substance
 - (1.3.2) a heating element provided within or proximate to the cartomizer body operable to heat the vaporizable substance,
 - (1.3.3) cartomizer electrical contacts provided on an exterior of the cartomizer;
 - (1.3.4) cartomizer electrical circuitry operable to direct an electrical current between the cartomizer electrical contacts and the heating element;
 - (1.3.5) a mouthpiece in fluid communication with the cartomizer body;
 - (1.3.6) the mouthpiece extending from the insertion end of the chamber when the cartomizer is inserted in the chamber.
 - (1.4) wherein the heating element is activated by the electrical current and is operable to heat the vaporizable substance to a vaporization temperature
 - (1.5) a battery housed within the battery segment
 - (1.6) battery electrical contacts provided between the base end of the chamber and the battery segment
 - (1.6.1) the battery electrical contacts positioned to contact the cartomizer electrical contacts when the cartomizer is inserted in the chamber
 - (1.7) battery electrical circuitry housed within the battery segment and operable to direct an electrical current between the battery, the battery electrical contacts, the cartomizer electrical contacts, and the heating element, when the cartomizer is inserted into the chamber
 - (1.8) the shell including a window provided at the cartomizer receiving segment so that a portion of the chamber is visible from outside the shell.
- 41. The claimant suggests a breakdown which subdivides feature (1.2.1) into features (1.2.1), (1.2.2) and (1.2.3). The Court considers that this further subdivision does not provide a more in-depth understanding of the invention. Even the claimant, after proposing such a structure of claim 1, addresses the feature (1.2.1) in its entirety without using the proposed breakdown.
- 42. With regard to the interpretation of the claims, it must be born in mind that: the patent claim is not only the starting point, but the decisive basis for determining the protective scope of the European patent; the interpretation of a patent claim does not depend solely on the strict, literal meaning of the wording used, as the description and the drawings must always be used as explanatory aids for the interpretation of the patent claim, but this does not mean that the patent claim serves only as a guideline and that its subject-matter may extend to what, from a

- consideration of the description and drawings, the patent proprietor has contemplated (see, Court of Appeal, order issued on 26 February 2024, UPC_CoA_335/2023).
- 43. The relative assessment must be carried from the point of view of a person skilled in the art which, in the present case, may be identified in a mechanical engineer with several years of experience in the technical field of vaporizers or in a team formed by a mechanical engineer and an electrical engineer. Indeed, common tasks in designing vaporizers fall into the competence of a mechanical engineer, as they relate to the outer physical shape and the mechanical properties of the devices, to the materials used for these devices and to their inner physical shape and regards also fluid dynamics and thermodynamics and requires knowledge of the electrical circuitry implemented in the devices of in other electronic inhalable aerosol devices as well.
- 44. The claimant argues that alternatively to a mechanical engineer the skilled person could alternatively possess a bachelor's or master's degree in chemistry or physics or a related field or someone from a related field. This does not convince as it would render the selection of the skilled person almost to an arbitrary measure and no persuasive argument is provided in support of this proposition.
- 45. Several features need to be carefully examined as the parties debated about their interpretation and, in any case, relate to relevant aspect of the claimed invention.
- 46. Firstly, with regard to feature (1.3.3) that specifies that the cartomizer includes cartomizer electrical contacts provided on an exterior of the cartomizer, the skilled person understands this feature in conjunction with feature (1.6) that specifies the battery electrical contacts to be provided between the base end of the chamber and the battery segment and in conjunction with feature (1.6.1) that specifies that the battery electrical contacts are positioned to contact the cartomizer electrical contacts when the cartomizer is inserted in the chamber. From this the skilled person understands that the requirement of feature (1.3.3) is a solution to enable the contact between the battery electrical contacts and the cartomizer electrical contacts when the cartomizer is inserted in the chamber. Therefore, considering that claim 1 does not disclose a specific design of the cartomizer electrical contacts or the battery electrical contacts, nor a particular arrangement on an exterior of the cartomizer, any design of cartomizer electrical contacts on an exterior of the cartomizer that in dependence and conjunction with a particular design of the battery electrical contacts may provide the contact specified in feature (1.6.1) falls under the design rule of feature (1.3.3).
- 47. In further support of this conclusion, it may be noted that Figs. 2 and 11 of the patent at issue show that different designs for the cartomizer electrical contacts on an exterior of the cartomizer are possible. Fig. 2 (partially represented below, left) shows the cartomizer electrical contacts flush with a downward facing surface of the cartomizer, while Fig. 11 (below, right) shows the cartomizer electrical contacts to be bulge shaped and to protrude from a downward facing surface of the cartomizer. This shows that the term 'on the exterior' is not limited to those arrangements where the cartomizer electrical contacts were to be arranged flush with an exterior surface of the cartomizer.





- 48. Secondly, feature (1.3.5) specifies that the cartomizer includes a mouthpiece in fluid communication with the cartomizer body. The claim language does not disclose how the mouthpiece is technically realized and does not require the mouthpiece to be detachable from the cartomizer body.
- 49. The claimant argues that the mouthpiece could only be seen to be a separate element to the cartomizer body, if the mouthpiece were detachable from the cartomizer body, but this argument does not convince. Indeed, the terms 'cartomizer body' and 'mouthpiece' must be understood with regard to the functions that they provide, which are, respectively, to be able to hold a vaporizable substance and to be insertable into the mouth of the user.
- 50. Lastly, claim 1 does not specify which portion of the chamber is to be made visible from outside the shell by way of the window, as disclosed in feature (1.8). Therefore, this feature must be understood in the sense that it refers to a window of any shape and size, located anywhere on the cartomizer receiving segment, that in some way allows some portion of the chamber to be visible from outside the shell.
- 51. The defendant argues that the window allows the user to view the cartomizer when it is inserted into the chamber and, by doing so, to determine if the cartomizer is correctly positioned and to determine the amount of vaporizable substance remaining in the cartomizer, but this is not convincing.
- 52. Indeed, the Court notes that the claimed effects would be achieved only if claim 1 were to specify a specific relation of the window on the cartomizer receiving segment relative to a position of the cartomizer in the cartomizer receiving segment, which is not the case.
- 53. With particular regard to the determination of the amount of vaporizable substance remaining in the cartomizer Fig. 1 of the patent shows that due to the small size of the window 130 and its positioning midway between insertion end and the base end, only a small portion in the middle of the cartomizer is visible. The Court notes that the user would not gain any helpful information on the amount of vaporizable substance remaining in the cartomizer from such an embodiment. This shows that not every embodiment that falls under claim 1 allows the user to determine the amount of vaporizable substance remaining in the cartomizer.

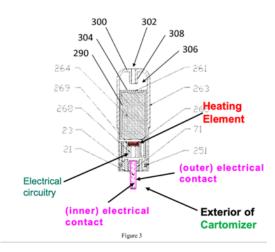
54. The defendant also argued in the oral hearing that in a system, where a colour-scheme is used for the cartomizer, wherein a respective colour of the cartomizer identifies to the user properties of the content of the cartridge, the window can be used to check the colour of the cartridge. On this point, the Court observes that this effect would be achieved only if claim 1 were to specify a specific property of the cartomizer (relating to a colour-scheme) and a specific relation of the window on the cartomizer receiving segment relative to a position of the cartomizer in the cartomizer receiving segment, which, however, is not described.

Claim 1. Lack of inventive step: a) 'Pan' as a starting point and common general knowledge.

- 55. The claimant argues that claim 1 lacks an inventive step over 'Pan' combined with common general knowledge and/or Korean Patent Application Publication No. 2012-0074625 A ('Lee') as the skilled person starting from 'Pan' and seeking to facilitate the consumer's determination of the state of the cartomizer and/or the vaporizable substance would naturally consider providing a window in the inhaler tube to allow viewing of part of the chamber. The claimant points out that such windows were well known in the state of the art on the earliest priority date claimed by the patent for allowing a person to identify how much solution remains in the device, and hence when a refill is needed, as clearly evident in 'Lee'.
- 56. The Court notes that the assessment of the inventive step must be carried out in the light of Article 56 'EPC' according to which 'An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art'. Hence, it is necessary to determine whether, given the state of the art, a person skilled in the art would have obtained the technical solution claimed by the patent using their technical knowledge and carrying out simple operations. Inventive step is defined in terms of the specific problem encountered by the person skilled in the art (see, Paris LD, decision issued on 3 July 2024, UPC CFI 230/2023).
- 57. In order to assess whether or not a claimed invention is obvious to a person skilled in the art, it is first necessary to determine one or more teachings in the prior art that would have been of interest to a person skilled in the art who, at the priority date of the patent in suit, was seeking to develop an invention or process similar to that disclosed in the prior art. Then, it must be assessed whether it would have been obvious for the skilled person to arrive at the claimed solution of the underlying technical problem on the basis of a realistic disclosure of the selected prior art (see, Munich CD, decision issued on 17 October 2024, UPC_CFI_252/2023; Dusseldorf LD, decision issued on 10 October 2024, UPC_CFI_363/2023).
- 58. The patent at issue does not explicitly state which problem is solved by the claimed solution. Para. [0013] generally states that the shell may include a window provided at the cartomizer receiving segment so that a portion of the chamber is visible from outside the shell. In relation to a particular embodiment, para. [0023] describes a window 130 to be provided on or proximate to cartomizer receiving segment 104 and, more particularly, to cartomizer chamber 108 so to permit a user of electronic cigarette 10 to view the cartomizer 200 when it is inserted into cartomizer chamber 108.
- 59. Given this background the underlying problem of the invention is to be seen to develop a vaporizer that has a shell having a battery segment and a cartomizer receiving segment with the cartomizer receiving segment defining a chamber having an insertion end distal from the battery

- segment and a base end proximate to the battery segment and a cartomizer insertable into the chamber at the insertion end, in such a manner that it allows a portion of a cartomizer receiving chamber of the shell to be visible from the outside.
- 60. What the claimed invention aims to achieve is very much limited to a specific structure of a vaporizer, namely a vaporizer that has a shell having a battery segment and a cartomizer receiving segment with the cartomizer receiving segment defining a chamber having an insertion end distal from the battery segment and a base end proximate to the battery segment and a cartomizer insertable into the chamber at the insertion end. For vaporizers that are of a different structure, the claimed invention achieves nothing. What the invention achieves is indeed very much linked to this particular type of vaporizer, allowing a portion of a cartomizer receiving chamber of the shell to be visible from the outside. Because the achievement of the claimed invention is so very much linked to and at the same time limited to vaporizers that have a cartomizer receiving chamber, defining within the underlying problem the object (the cartomizer receiving chamber) that has the portion that is to be made visible from the outside, is not a pointer to the solution, but describes the technical context in which the claimed invention must be seen
- 61. The defendant argues that the overall common problem is to provide a vaporizer with an improved user experience (see para. 77 of the defence to revocation), but this argument is not convincing, as the suggested technical problem appears to be too unspecific and without a link to what the invention actually achieves over the state of the art, and furthermore, lacking any reference to the technical aspects of the claimed invention.
- 62. Having said that, the Court agrees with the claimant that the teachings disclosed in 'Pan' combined with the common general knowledge are a suitable starting point in the assessment of the inventive step.
- 63. 'Pan' relates to an electronic cigarette and discloses a vaporizer with all features of the claimed invention with the exception of the feature (1.8). Actually, the defendant does not explicitly contest that 'Pan' describes a vaporizer with the features (1.1), (1.2), (1.2.1), (1.3.1), (1.3.2), (1.3.4), (1.3.5), (1.4), (1.5) and (1.7).
- 64. For completeness, it may be noted that 'Pan' shows an electronic cigarette [see para. 0002], that has an inhale tube 10, which is a shell, and this inhaler tube 10 has a part in which the electric power source 5 is arranged (the battery segment) and a part into which the integrated electronic atomizer is (partially) inserted (the cartomizer receiving segment) (see paras. [0029], [0033], [0034], [0035] and [0037] and Figs. 3, 5 and 7). The inhaler tube 10 has an open-end chamber, into which the integrated electronic atomizer is partially inserted, which is distal from the part of inhaler tube 10 in which the electric power source 5 is arranged and has a base end that is arranged proximate that part of inhale tube 10 (see para. [0037] and Figs. 5 and 7). Furthermore, para. [0029] describes the liquid container 261, which is a cartomizer body that is dimensioned to hold a vaporizable substance and a heating element provided proximate to the cartomizer body operable to heat the vaporizable substance. All this gives evidence that features (1.1), (1.2), (1.2.1), (1.3.1), (1.3.2) are disclosed in 'Pan'.
- 65. Regarding feature (1.3.3) in 'Pan' the integrated electronic atomizer has a DC plug 21 located on a plug seat 71 (see para. [0029] and Fig. 3, below reproduced in a version annotated by the

claimant with some explanatory information). To the skilled person, the term 'a DC plug' indicates an electrical connector for supplying direct current (DC) power. 'Pan' shows a DC plug-socket type second electric connector 21 of the integrated electronic atomizer that are understood to provide electrical contacts (in the plural) (see paras. [0029], [0033] and [0037] and Figs. 3, 5 and 7).



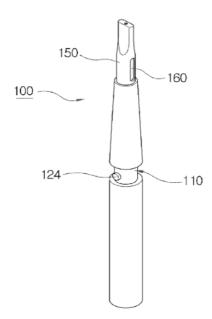
- 66. A pin of the DC plug of the electronic atomizer (the cartomizer in 'Pan') protrudes from the bottom end of the electronic atomizer. Similarly, the electric contacts 218 shown in the embodiment of Fig. 11 of the patent at issue also protrude from the lower part of the cartomizer. Therefore, the Court concludes that the described pin of the DC plug of 'Pan' provides cartomizer electrical contacts that are on an exterior of the cartomizer as the electric contacts 218 in the embodiment of Fig. 11 of the patent at issue do.
- 67. Feature (1.3.4) is disclosed by paras. [0029], which describes the integrated electronic atomizer of 'Pan' to have a DC plug 21 and a heat equalizer 269 twined with an electric heating wire 265, and [0037], which describes an electrical combination of the inhaler tube and the atomizer tube to be done via a connection through the first electric connector socket 28 of the electronic inhaler and the second electric connector plug 21.
- 68. The atomizer tube 263 described in 'Pan' has an air-puffing hole in the centre of one end of the atomizer tube 263 which is a mouthpiece (see paras. [0029] and [0037] and Fig. 3): therefore, feature (1.3.5) is also disclosed.
- 69. The mouthpiece provided by the one end of the atomizer 263 with the air-puffing holes extends from the insertion end of the chamber when the cartomizer is inserted in the chamber [feature (1.3.6)].
- 70. 'Pan' discloses that the heating element is activated by the electrical current and is operable to heat the vaporizable substance to a vaporization temperature [see paras. [0029] and [0037], as well as an electric power source 5 housed within the battery segment of the electronic inhaler, as required, respectively, by features (1.4) and (1.5).
- 71. About feature (1.6) the defendant argues that 'Pan' does not disclose more than one battery electrical contact. The Court disagrees with the defendant on this point, as the skilled person's understanding of the design of the first electric connector 17 has been detailed above in connection with feature (1.3.3).

- 72. 'Pan' discloses feature (1.7) as the electric power source 5 is connected to an integrated circuit board which, in turn, is connected to the first electric connector 17 comprising the claimed battery electrical contacts and the integrated circuit board (see paras. [0033] and [0034]).
- 73. Both parties agree that 'Pan' does not disclose feature (1.8) as it does not describe a shell including a window provided at the cartomizer receiving segment so that a portion of the chamber is visible from outside the shell.
- 74. However, providing a non-transparent wall of a chamber with a window as a solution to the problem to allow a portion of a chamber to be visible from the outside belongs to the common general knowledge of the skilled person, as it is the most basic approach known to him or her when confronted with the problem.
- 75. In addition, the Court notes that 'Lee' indicates in para. [0005] that in existing electronic cigarettes designed to provide several tens or more smoking sessions from a single refill of a cartridge, their mouthpiece is typically made of a transparent or semi-transparent structure to facilitate checking of the level of liquid refillable solution stored inside the cartridge. While it is in general questionable that a particular published patent application or patent specification can be considered as an indication of the common general knowledge, however said para. [0005] describes what the author of the patent considered to be a widely spread approach at the time. Therefore, by the nature of this type of description, para. [0005] can be seen as an indication that providing a mouthpiece of an e-cigarette with a transparent or semi-transparent structure so as to facilitate checking of the level of liquid refillable solution stored inside the cartridge belonged to the common general knowledge at the time of filing of the application, namely in December 2010.
- 76. It follows that, given this common general knowledge, the skilled person in his attempt to solve the underlying problem of developing a vaporizer that allows a portion of a cartomizer receiving chamber of the shell to be visible from the outside, would have found the claimed invention on the basis of its knowledge and skills, namely by providing the shell in the device already known from 'Pan' to include a window on the cartomizer receiving segment so that a portion of the chamber was visible from outside the shell, as an obvious modification.

Claim 1. Lack of inventive step: b) 'Pan' as a starting point and 'Lee'.

- 77. The Court notes that starting from the teaching disclosed in 'Pan', the skilled person, in the attempt to solve the underlying problem, would have looked at 'Lee' which discloses a device that has the same basic structure as the one disclosed 'Pan'.
- 78. 'Lee' describes an electronic cigarette 100 (a vaporizer) that has a main body 110 (a shell) having a power supply part 120 (a battery segment) and an atomizer unit 140 (a cartomizer receiving segment). The atomizer unit 140 defines a chamber (the space in the atomizer unit 140 that is partially taken up by the cartridge unit 130) that has an insertion end distal from the battery segment (the free end through which the cartridge unit 130 is inserted into the space in atomizer unit 140) and has a base end proximate to the battery segment. The vaporizer of 'Lee' has a cartomizer insertable into the chamber at the insertion end (see, in particular, para. [0023]).

Fig.1



- 79. Structurally, the device disclosed in 'Lee' is essentially different from the one disclosed in 'Pan' only in that in the latter the heater is arranged in the exchangeable cartridge, while in the first one the heater is arranged in the atomizer unit 140; for the remaining aspects the structural features relevant for solving the underlying problem are very similar.
- 80. As a key feature topic 'Lee' extensively presents a solution for allowing a portion of a chamber to be visible from the outside. In this regard 'Lee' teaches to provide the electronic cigarette with a level check window placed in the cartridge, possibly formed of a semi-transparent or transparent material, that would allow to check the level of a refillable solution remaining in the cartridge as well as to reduce the causes of electronic malfunction (paras. [0005], [0013], [0029] and [0033]).
- 81. Given this explicit guidance in 'Lee', the skilled person, in his attempt to solve the underlying problem of developing a vaporizer that allows a portion of a cartomizer receiving chamber of the shell to be visible from the outside, would have found the claimed invention on the basis of its knowledge and skills, namely by providing the shell in the device already known from 'Pan' to include a window provided at the cartomizer receiving segment, as an obvious modification.
- 82. The defendant argues that the window in 'Lee' is provided in the mouthpiece. However, looking for a solution to the problem to provide means that allow a portion of a cartomizer receiving chamber of the shell to be visible from the outside, the skilled person obtains from 'Lee' the general guidance that for the relevant vaporizers a window can be used to look into the chamber that contains the cartridge. On the basis of his knowledge and skills, the skilled person would provide the window that 'Lee' shows in the upper part of the chamber (the part that is enclosed by the mouthpiece) at the cartomizer receiving chamber, because the cartomizer receiving chamber is the object to which the skilled person is in search for means to allow a portion of it to be visible from the outside.
- 83. For the aforementioned reasons, claim 1 of the patent at issue is not valid and, therefore, the patent cannot be maintained as granted.

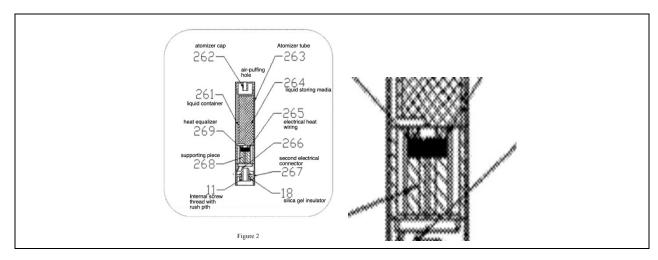
Auxiliary request I.

- 84. Auxiliary request I amend claim 1 with regard to feature (1.3.1) by specifying that the vaporizable substance held in the cartomizer body is fluid.
- 85. As indicated above, the integrated electronic atomizer of 'Pan' has a liquid container 261 [see Fig. 3 and para. [0029]) and a liquid-storing media 264 that is filled with liquids to be inserted inside the liquid container 26. Therefore, 'Pan' discloses the additional feature included in Auxiliary Request I, as the term "fluid" encompasses also liquids.

Auxiliary request II.

- 86. Auxiliary request II builds on Auxiliary request I and adds the following feature: "a wicking element (216) is provided within the cartomizer body".
- 87. The Court is of the opinion that 'Pan' describes also a wicking element placed within the cartomizer body by way of the heat equalizer 269 provided within the cartomizer body. Indeed, para. [0012] in 'Pan' discloses that the electric current flows through the electric heat wire inside the atomizer tube, which then heats up the heat equalizer with absorbed liquid from the liquid-container and the heat equalizer converts the liquid into a form of a vapor mist, which is finally drawn into the mouth of the user.
- 88. The defendant argues the heat equalizer 269 cannot be interpreted as a wick or wicking element, as it is just a structure that is heated by the electric heating wire 265 to thereby supply heat for vaporization of the liquid inside the liquid-storing media 264. Indeed, the skilled person would understand that the liquid absorbed in the liquid-storing media 264 is heated and converted "into a form of vapor mist" due to proximity to the high temperature of the heat equalizer 269, not that any wicking or capillary forces have acted on any liquid. In the oral hearing the defendant also explained the feature disclosed in 'Pan' recalling the 'hairdryer principle', arguing that the electric heat wire and the heat equalizer heat the air that is pulled through them by the suction of the user and for the (dry) heated air to flow through the liquid-storage media 264 to then vaporize the liquid inside the liquid-storing media 264.
- 89. The defendant further argues that the reference to "inside the liquid chamber" in para. [0025] of 'Pan' is to be understood as a reference to the location where the vaporization is to take place and hence this would necessitate that the device disclosed in 'Pan' works with the 'hairdryer principle'. The defendant points to a white space that is visible in Fig. 3 which separates the heat equalizer from the liquid-storing media 264 that speaks against liquid from the liquid-storing media 264 reaching the heat equalizer.
- 90. Moreover, the defendant notes that 'Pan' requires the material of the heat equalizer to withstand a high temperature up to 2000 degrees centigrade and this is an indication that the device is to operate according to the 'hairdryer principle'.
- 91. The Court disagrees with the defendant. As indicated above, 'Pan' attributes particular importance to the heat equalizer in the generation of the vapor and explicitly states that it is the heat equalizer that converts the liquid into a form of vapor mist (see paras. [0012] and [0014]). The conversion from liquid into vapor mist hence takes place within the heat equalizer and not

- as suggested by the defendant downstream of the heat equalizer in the liquid-storage media 264.
- 92. The use of the term "inside the liquid-storage media" is understood by the skilled person as a reference to where the liquid that is to be vaporized is supplied from rather than a location where the vaporization takes place. The vaporization principle implemented in 'Pan' is described in para. [0012] in which it is stated that the electric heat wire heats up the heat equalizer with absorbed liquid from the liquid container. The term "absorbed liquid from the liquid container" is to be understood as to attribute the function of liquid supply to the liquid container. The heat equalizer has absorbed liquid, which is supplied to it by the liquid container. This to the skilled person's understanding this is a description of a wicking element.
- 93. This conclusion is not contradicted by Fig. 3, which is only a sectional view and, therefore, is not sufficient to demonstrate which extend the white space has in a direction perpendicular to the sectional plane. In fact, given that para. [0012] explicitly states that the heat equalizer absorbs liquid from the liquid-container, the skilled person understands that the white space in Fig. 3 does not extend through the entire cross-section, but that liquid storing media 264 and heat equalizer are in contact. This view is supported by Fig. 2 (below, left; enlarged section of Fig. 2 below, right) that shows the fluid-storage media 264 to reach down to the heat equalizer on the right-hand side, while a white space, that to the skilled person's understanding is part of a channel, branches off from the heat equalizer towards the left. It is also noted that para. [0013] highlights the unique technical advances achieved by an integrated atomizer technology achieved by the device of 'Pan' in distinction over prior art devices, where the liquid chamber is made as a separate piece which must be inserted into the atomizing chamber before the electronic cigarette can be used.



94. Lastly, the reference to high temperatures is understood by the skilled person as an instruction for a material choice of the fibres to ensure a safe operation of the device (see, in particular, paras. [0027] and [0028]).

Auxiliary request III.

95. Auxiliary request III builds on Auxiliary request II and adds the following further features: "an inhalation tube (222) in fluid connection with the heating element and the wicking element, wherein the heating element operable to heat the vaporizable substance to the vaporizing temperature is configured to create a vaporized fluid, and

- wherein the inhalation tube is configured to let the vaporized fluid travel there through to the mouthpiece for inhalation by a user".
- 96. Para [0012] of 'Pan' discloses a heat equalizer that converts the liquid into a form of a vapor mist, which is finally drawn into the mouth of the user, and a tube that extends inwards from the mouthpiece and that is in fluid connection with the heating element and the wicking element. Therefore, all the added features mentioned in Auxiliary request III are disclosed in 'Pan'.

Auxiliary request IV.

- 97. Auxiliary request IV builds on Auxiliary request I and adds the further feature: "wherein at least a portion of the cartomizer body is composed of a translucent material."
- 98. To the skilled person's understanding the term "translucent material" refers to a material that is almost transparent, allowing some light through it, but that is not necessarily a transparent material. The Court notes that the term "translucent material" is ambiguous in that it is a relative term, as a material can be highly translucent, allowing a high amount of light through it, or can mildly translucent, allowing some or a little light through it.
- 99. Auxiliary request IV does not indicate which level of translucency the translucent material is to achieve. Furthermore, Auxiliary request IV does not specify which portion of the cartomizer body is composed of a translucent material, how large this portion is and in which spatially relationship the portion is in relation to other elements of the vaporizer, in particular to the window in the shell at the cartomizer receiving segment.
- 100. 'Pan' discloses the integrated electronic atomizer (which is the cartomizer body in the patent at issue) to have a metal or a plastic tube. Plastic tubes can be made of non-translucent, mildly translucent or highly translucent material. To choose a mildly translucent plastic material or highly translucent plastic material for the tube of the integrated electronic atomizer in 'Pan' is a simple choice of material that the skilled person may easily make, for example to give the integrated electronic atomizer a certain appearance.
- 101. It follows that the feature added in Auxiliary request IV is also disclosed in 'Pan'.

Auxiliary request V.

- 102. Auxiliary request V builds on Auxiliary request IV and adds the following feature: "a wicking element (216) is provided within the cartomizer body".
- 103. As discussed for Auxiliary Request III, 'Pan' discloses this added feature.

Auxiliary request VI.

- 104. Auxiliary request VI combines the amendments introduced in Auxiliary request III and adds the further feature: "wherein at least a portion of the cartomizer body is composed of a translucent material."
- 105. As explained above these added features are already disclosed in 'Pan'.

Auxiliary request VII.

- 106. Auxiliary request VII builds on Auxiliary request VI and specified that the heating element is a "single" heating element.
- 107. This amendment is not sufficient to demonstrate the validity of the patent as the heat wire disclosed in 'Pan' is a single heating element as well.

Auxiliary request VIII.

- 108. Auxiliary request VIII builds on Auxiliary request VI and adds the following features: "wherein the shell (106) is an outer shell, and wherein the battery segment (102) and the cartomizer receiving segment (104) commonly share the shell (106)".
- 109. These added features are present in 'Pan' which discloses either that the inhaler tube 10 is an outer shell and that the battery segment and that the cartomizer receiving segment commonly share the shell (see Fig. 5).

Auxiliary request IX.

- 110. Auxiliary request IX builds on Auxiliary request VIII and further specifies that the vaporizable substance held in the cartomizer body (208) is a "free-standing fluid".
- 111. The Court notes that while the meaning of the term "fluid" is clear, as it encompasses liquids and gases, it is unclear what is to be meant by a gas to be "free-standing".
- 112. The defendant does not provide any definition or explanation of the meaning of this term, merely asserting that the claim language is clear, but no useful arguments are provided on this point.
- 113. Therefore, the application to amend the patent with the claim set in Auxiliary Request IX must be rejected as it contravenes Article 84 of the European Patent Convention, according to which the claims must be clear.

Auxiliary request X.

- 114. Auxiliary request VI builds on the Auxiliary request IX and adds the specification that the heating element is a "single" heating element.
- 115. For the reasons illustrated with regard to Auxiliary requests VII and IX the added feature is not sufficient to exclude the invalidity of the patent.

Claim 2.

- 116. As the application to amend the patent is unfounded, the Court must address the defendant's alternative request to maintain the patent in suit in part with regard of one or more of its dependent claims. This request is consistent with Article 65 (3) of the Unified Patent Court Agreement ('UPCA'), according to which "Without prejudice to Article 138(3) of the EPC, if the grounds for revocation affect the patent only in part, the patent shall be limited by a corresponding amendment of the claims and revoked in part". Therefore, the objection raised by the claimant on this point must be dismissed.
- 117. Claim 2 recites as follows: "The vaporizer of claim 1, wherein the window is made of a translucent material".

118. This claim 2 lacks inventive step for the reasons indicated with regard to Auxiliary request IV.

Claim 3.

- 119. Claim 3 recites as follows: "The vaporizer of claim 1, wherein the window is a slit cut into the shell."
- 120. Para. [0031] and Figs. 1, 2 and especially 4 in 'Lee' describe "an oblong shape having a length relatively greater than its width", which disclose the "slit cut into the shell" claimed in the patent at issue.
- 121. Given this teaching, the skilled person would find the claimed invention of claim 3 obvious, namely by making the window a slit cut into the shell when providing the window at the cartomizer receiving segment.

Claim 4.

- 122. Claim 4 recites as follows: "The vaporizer of any of the previous claims, wherein the window is provided on or proximate to the cartomizer receiving segment."
- 123. The added feature is disclosed in 'Lee', which describes that the level check window 160 is provided on a cartomizer receiving segment of the mouthpiece 150. For this reason, the dependent claim 4 does not involve an inventive step.

Claim 5.

- 124. Claim 5 recites as follows: "The vaporizer of any of the previous claims, wherein the window is configured to permit viewing of the cartomizer when the cartomizer is inserted into the cartomizer chamber."
- 125. As indicated above, providing the shell with a window provided at the cartomizer receiving segment so that a portion of the chamber is visible from outside the shell is obvious to the person skilled in the art.

Claim 6.

- 126. Claim 6 recites as follows: "The vaporizer of any of the previous claims, wherein at least a portion of the cartomizer body is composed of a translucent material".
- 127. As stated with regard to Auxiliary request IV, making a portion of the cartomizer body to be composed of a translucent material is a simple choice of suitable material for a cartomizer body.

Claim 7.

- 128. Claim 7, as resulting from the amendment occurred during the European Patent Office opposition proceedings, recites as follows: "The vaporizer of any of the previous claims, wherein the translucent material of the cartomizer body comprises glass or plastic".
- 129. As previously indicated, making at least a portion of the cartomizer body to be composed of a translucent material is a simple choice of suitable material for a cartomizer body. The skilled person would naturally derive the use of glass or plastic because these materials are commonly used in many fields of technology and in everyday items where light transmission is required. It follows that granted claim 7 does not involve an inventive step.

Claim 8.

- 130. Claim 8 recites as follows: "The vaporizer of any of the previous claims, wherein the cartomizer further includes a container provided within the cartomizer body and dimensioned to hold the vaporizable substance, wherein the heating element is provided exterior to at least a portion of the container and is operable to heat the container thereby heating the vaporizable substance to the vaporization temperature."
- 131. In 'Pan' the liquid-storing media 264 apart from those part that connect to the wick-type heat equalizer is arranged in a liquid container 261 which is located above the heating wire 265 and the heat equalizer 269 (see Fig. 3). Hence, 'Pan' discloses the distinguished features added in claim 8.
- 132. Indeed, to the skilled person's understanding, given the proximity of the heating wire 265 to the liquid-storing media 264 and given the typical temperatures that the heating wire will be heated up to, heat radiating from the heating wire will albeit to a small extend reaches the liquid-storing media and consequently heats the vaporizable substance to the vaporization temperature.
- 133. It is noted that claim 8 does not indicated the heating mechanism prescribed therein to be the only mechanism for generating vape. Therefore, even if in 'Pan' the predominant amount of vape is generated in the wick-type heat exchanger and only a minimal amount of vape is generated by heat radiation from the heating wire 265 to the liquid-storing media 264, the teaching of claim 8 is fulfilled.

Claim 9.

- 134. Claim 9 recites as follows: "The vaporizer of any of the previous claims, wherein the heating element includes conductive material intertwined with non-conductive material, and the conductive material is in electrical communication with the cartomizer electronic circuitry".
- 135. Paras. [0027] and [0029] in 'Pan' indicate that the heat equalizer 269 is made of fibres, which the skilled person understands to be of non-conductive material as this is typically used for wick-type elements, and is twined with electric heat wire 265, which is a conductive material (see also Fig. 1).
- 136. It follows that granted claim 9 does not involve an inventive step.

Claim 10.

- 137. Claim 10 recites as follows: "The vaporizer of any of the previous claims, further comprising a printed circuit board housed in the battery segment and in electrical communication with the battery electrical circuitry, and the cartomizer further includes a sensor in electrical communication with the cartomizer electrical circuitry, wherein the printed circuit board is operable to process environmental information received from the sensor when the cartomizer is inserted into the chamber".
- 138. 'Pan' describes in para. [0034] and shows by way of Fig. 5 that the circuit board 14 (a printed circuit board) (112) is housed in the battery segment (inhaler tube 10) and is in electrical communication with the battery electrical circuitry (the power source 5) and that an airflow

sensor 6 is arranged in the inhaler tube. 'Pan' also discloses in para. [0026] that the magnitude of the electric current supplied from the electric power source 5 depends on the magnitude of signal detected from the airflow proportional to the strength of user's puffing action. According to 'Pan', this controls the temperature and heat generated through the electric heating wires and heat equalizer.

- 139. Compared to this disclosure, claim 10 suggests the cartomizer to further include a sensor in electrical communication with the cartomizer electrical circuitry, which records a temperature above a preset vaporization temperature range and may lead to an automatic shutoff, wherein the printed circuit board is operable to process environment information received from the sensor when the cartomizer is inserted into the chamber.
- 140. U.S. Patent Application Publication No. 2011/0308521 A1 ('Kofford') suggests a vaporizer for vaporizing herbal material with a temperature sensor to be in electrical communication with a temperature control unit for measuring the temperature of the herbal receptacle to determine whether the temperature of the herbal receptacle is within the desired vaporization range.
- 141. Guided by 'Kofford', a skilled person would provide the integrated electronic atomizer with a temperature sensor in electrical communication with the cartomizer electrical circuitry, such that the CPU processor 14 of 'Pan' could process temperature information (environment information) received from the temperature sensor when the cartomizer is inserted into the chamber.
- 142. It follows that the vaporizer of granted claim 10 does not involve an inventive step, because, having regard to 'Pan', the claimed invention is obvious to the person skilled in the art.

Claim 11

- 143. Claim 11 recites as follows: "The vaporizer of any of the previous claims, wherein the mouthpiece is detachably connected to the cartomizer body".
- 144. 'Lee' discloses the mouthpiece to be detachably connected to the cartomizer body (see paras. [0020] and [0024]). Therefore, the vaporizer of granted claim 11 does not involve an inventive step as it is obvious to the person skilled in the art.

Claim 12

- 145. Claim 12 recites as follows: "The vaporizer of any of the previous claims, wherein the cartomizer further includes a basin (214B) for holding the vaporizable substance, and wherein the heating element is provided proximate to the basin in order to heat the basin".
- 146. In 'Pan' the liquid-storing media 264 is apart from those parts that connect to the wick-type heat equalizer arranged in a liquid container 261, which can be considered as a basin for holding the vaporizable substance. The heating wire 265 and the heat equalizer 269 are arranged below this liquid container 261 in the viewing direction of Fig. 3. 'Pan', hence, discloses the cartomizer (the integrated electronic atomizer) to further includes a basin (the liquid container 261) for holding the vaporizable substance, and wherein the heating element (heating wire 265) is provided proximate to the basin (the liquid container 261) in order to heat the basin. It follows that the vaporizer of granted claim 12 does not involve an inventive step over 'Pan'.

Claim 13.

- 147. Claim 13 recites as follows: "The vaporizer of any of the previous claims, further comprising:
 - a wicking element provided within the cartomizer body; and
 - an inhalation tube in fluid connection with the heating element and the wicking element, wherein the heating element operable to heat the vaporizable substance to the vaporizing temperature is configured to create a vaporized fluid, and wherein the inhalation tube is configured to let the vaporized fluid travel there through to the mouthpiece for inhalation by a user".
- 148. As explained with regard to Auxiliary Request II and III 'Pan' discloses the distinguished added features included in claim 13, which, therefore, turns out to be obvious to the person skilled in the art.

Claim 14.

- 149. Claim 14 recites as follows: "The vaporizer of any of the previous claims, wherein the vaporizable substance is a fluid".
- 150. As illustrated with regard to Auxiliary request I, the vaporizable substance in 'Pan' is a liquid, which is a fluid. Hence, the added distinguished feature described in claim 14 is already anticipated by 'Pan'

Partial revocation.

- 151. The defendant further requests, in the alternative, that in case the grounds for revocation affect the patent only in part the patent is maintained to the extent of one or more of its dependent claims as granted in combination with claim 1 of the proposed amendments of the claims of the patent.
- 152. This Central Division has already stated that such a request is, in principle, admissible, as Article 65 (3) 'UPCA' allows the Court to evaluate if the grounds for revocation affect the patent as granted only in part and to revoke the patent (only) in part accordingly (see Paris CD, decision issued on 5 November 2024, UPC_CFI_309/2023).
- 153. However, the defendant does not explain why the possible combinations of the claims would provide particular reasons to uphold the patent, even if partially, leaving the request unclear and not substantiated.
- 154. It may be further considered that, according to Rules 30 (1) (c) and 50 (2) 'RoP', the proposed amendments, if they are conditional like in the present case, must be reasonable in number in the circumstances of the case. In the current proceedings, the conditional amendments that have been submitted with regard to the request of a partial invalidity of the patent are not reasonable in number.

Conclusions.

- 155. For these reasons, the grounds for invalidity raised by the claimant against the patent at issue and addressed by the panel are well founded and any arguments of the parties which have not been specifically considered must be deemed absorbed.
- 156. Therefore, patent EP '214 shall be revoked.

Costs.

- 148. The costs of the Court and of the claimant shall be borne by the defendant, as the unsuccessful party.
- The panel notes that during the interim conference, the value of the revocation action for the purpose of applying the scale of ceilings for recoverable costs was set at 500,000.00 euros and confirms this evaluation.

DECISION

The Court:

- a) declares the European patent n° EP 3 456 214 revoked in its entirety with regard to the territories of the Contracting Member States for which the European patent had effect at the date of the filing of the revocation action;
- b) orders that the Registry shall send a copy of this decision to the European Patent Office and to the national patent offices of any Contracting Member States concerned after the deadline for appeal has passed;
- c) orders that the costs of the proceedings shall be borne by the defendant.

Issued on 27 November 2024.

Presiding judge and judge-rapporteur

Paolo Catallozzi

Paolo Catallozzi Firmato digitalmente da Paolo Catallozzi Data: 2024.11.27 19:54:05 +01'00'

Legally qualified judge

Tatyana Zhilova

Zhilova

Tatyana Signature numérique de Tatyana Zhilova Date: 2024.11.27 19:48:57 +01'00'

Technically qualified judge

Max Tilmann

Max Wilhelm Tilmann

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Clerk

Margaux Grondein

Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet

Signature numérique de MARGAUX MARIE-**ANGE GRONDEIN**

Date: 2024.11.27 20:11:01 +01'00'

ORDER DETAILS

Order no. ORD_598498/2023 in ACTION NUMBER: ACT_571565/2023

UPC number: UPC_CFI_308/2023 Action type: Revocation Action

Related proceeding no. Not provided Not provided

Not provided Not provided