



Central Division
Paris Seat

DECISION
of the Court of First Instance of the Unified Patent Court
Central division (Paris seat)
issued on 21 January 2025
in the revocation action No. 571745/2023
UPC_CFI 311/2023

HEADNOTES: In order to assess whether or not a claimed invention lacks inventive step, it is first necessary to determine one or more realistic starting points in the state of the art, which would be of interest to a person skilled in the art who, at the priority date of the patent in suit, was seeking to develop a product or process similar to that disclosed in the prior art. In particular, realistic starting points are the documents which disclose the main relevant features as those disclosed in the challenged patent or which address the same or a similar underlying problem.

KEYWORDS: inventive step.

CLAIMANT:

NJOY Netherlands B.V. - Westerdoksdijk 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 3 626 092

PANEL:

Panel 2:

Paolo Catalozzi

Presiding judge and judge-rapporteur

Tatyana Zhilova

Legally qualified judge

Max Tilmann

Technically qualified judge

SUMMARY OF FACTS AND PARTIES' REQUESTS:

1. On 15 September 2023, NJOY Netherlands B.V. filed a revocation action against VMR Products LLC before this Central Division, registered as No. ACT_571745/2023 UPC_CFI_311/2023, requesting that the patent at issue ('092) be revoked with effect to the territories of Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Germany, Italy Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovenia and Sweden, 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 25 March 2020 and claims a priority of two patent applications of 12 November 2013 (US201361903344 P) and 10 February 2014 (US 201461937851 P). The date of publication and mention of the grant of the patent is 5 July 2023. The patent was opposed; the opposition proceedings are pending before the Opposition Division of the European Patent Office.
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 device comprising:
a battery portion (100), the battery portion (100) having a first end (102A) and a second end (104A) and comprising:
an outer shell (106) for covering or protecting one or more of the components of the battery portion (100);
a battery housing segment (102) proximate the first end (102A) of the battery portion (100);
a cartomizer receiving segment (104) proximate the second end (104A) of the battery portion (100), wherein the outer shell (106) is commonly shared by the battery housing segment (102) and the cartomizer receiving segment (104), wherein a cartomizer chamber (108) is provided within at least a portion of the cartomizer receiving segment (104), the chamber (108) having an insertion end distal to the battery housing segment (102) and a base end proximate to the battery housing segment (102); and
a cartomizer (200) insertable into the chamber (108) at the insertion end of the chamber (108), the cartomizer (200) having a mouthpiece end (212) and an insertion end (210) defined opposite the mouthpiece end, the cartomizer (200A) comprising:
a cartomizer body (208) configured to hold a fluid vaporizable substance, wherein at least a portion of the cartomizer body (208) comprises a translucent material configured to allow viewing of the fluid vaporizable substance, wherein the cartomizer body (208) is configured for insertion into the chamber (108);

a heating element (214) and a wicking element (216) within the cartomizer body (208), wherein the heating element (214) is configured to heat the fluid vaporizable material;

an inhalation tube (222) in fluid communication with the heating element (214) and the wicking element (216);

a mouthpiece (220) at or proximate to the mouthpiece end (212), the mouthpiece (220) in fluid communication with the inhalation tube (222), the mouthpiece (220) extending from the insertion end of the chamber (108) when the cartomizer (200) is inserted in the chamber (108);

a plurality of cartomizer electrical contacts (218) on an exterior of the insertion end (210), and

cartomizer electrical circuitry operable to direct an electronic current between the cartomizer electrical contacts (218) and the heating element (214);

a battery (110) housed within the battery housing segment (102);

battery electrical contacts provided between the base end of the chamber and the battery housing segment (102), the battery electrical contacts positioned to contact the cartomizer electrical contacts (218) when the cartomizer (200) is inserted in the chamber (108); and

battery electrical circuitry housed within the battery housing segment (102) and operable to direct an electrical current between the battery (110), the battery electrical contacts, the cartomizer electrical contacts, the heating element (214) and the inserted cartomizer (200).

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') or US-Patent Application No 2005/0268911 A1 ('Cross').
5. On 18 December 2023 the defendant lodged the (corrected) defence to revocation which included a conditional application to amend the patent based on 7 different amendments and consisting of 20 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 and defence to the application to amend the patent, filed on 19 February 2024, the claimant also requested the Court to dismiss the defendant's alternative requests.
7. On 19 March 2024 the defendant lodged its rejoinder to claimant's reply requesting that exhibits 'MWE 16' to 'MWE 39' and 'MWE 41' to 'MWE 44a' and document DE 20 2010 002 041, submitted by the claimant with its reply, not be admitted into the proceedings.
8. On 19 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 16' to 'MWE 53' 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 10 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 16' to 'MWE 53'.
10. After the closure of the written procedure an interim conference was held on 15 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 19 April 2024 lodged by the defendant on 10 May 2024 shall also be excluded from consideration.
11. On 26 November 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. On 4 December 2024 defendant filed a further submission and a certified translation as 'TP 12', requesting not to permit the translation 'MWE 9a' provided by the claimant into the proceedings.
13. On 5 December 2025 claimant filed a submission in reply to defendant's submission of 4 December 2024.
14. Finally, the oral hearing was held on 5 December 2024.

GROUNDINGS FOR THE DECISION

Admissibility of late filed assertions and late filed evidentiary documents.

15. As previously mentioned, the claimant submitted new evidentiary documents (Exhibits 'MWE 16' to 'MWE 39' and 'MWE 41' to 'MWE 44a' and document DE 20 2010 002 041) 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 40' 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.
16. 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.
17. 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.

18. 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 ...".
19. 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. (l)], "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)].
20. In general, the parties are under an obligation to set out their full case as early as possible (Preamble 'RoP', para. 7, last sentence).
21. This legal framework introduces the so-called 'front loaded' procedural system whereby a claimant is required to concretely elaborate his arguments and evidence in his 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.
22. 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.
23. 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.
24. 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.

25. 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.
26. 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.
27. Consequently, the claimant cannot introduce new grounds of invalidity of the attacked patent or introduce new documents considered novelty destroying or affecting 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.
28. Similarly, the claimant must specify in the statement for revocation the facts that it considers necessary to prove in order to succeed in its claim, together with the relevant evidence.
29. 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.
30. 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.
31. 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.
32. 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 – including the declaration released by [REDACTED] and the documents referred to in that statement – are admissible, given that they contain 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 [REDACTED] 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.
33. 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.

34. 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.
35. 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 claimant may lodge a rejoinder to the reply to the defence to the application to amend the patent which shall be limited to the matters raised in the reply.
36. 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 rejoinder that do not address the arguments in the defendant's reply – in particular, section B), C), D), E) and F) of the writ –, as well as Exhibit MWE 45 to 53 shall be disregarded.
37. The same conclusion must be reached with respect to the defendant's comments filed on 10 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.
38. 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.
39. As previously mentioned, parties' applications dated 4 and 5 December 2024 concern the accuracy of the translation of para. [0005] of the Korean Patent Application Publication No. 2012-0074625 A ('Lee'). The translation provided by the claimant in 'MWE 9a' reads that: "[...] In particular, in such 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 so as to facilitate checking of the level of liquid refillable solution stored inside the cartridge." This translation is challenged by the defendant with the said application filed only on 4 December 2024, which submitted a different translation as 'TP-12'. The defendant argues that an English translation of para. [0005] of 'Lee' ought not to include the term "typically" which is included in the translation submitted by the claimant as 'MWE 9a' and which may mislead the Court.
40. The Court is of the opinion that regardless of whether the defendant's submission (and claimant's consequential one) are admissible or not, as they were filed well after the closure of the written procedure, the issue raised by the defendant is not relevant for the outcome of the action because even assuming that the translation submitted by the defendant is the correct one, the alleged erroneous presence of the term "typically" does not affect the general teaching of para. [0005] of 'Lee' for the purposes of the present judgment. Indeed, the word "typically" in the translation provided as 'MWE 9a' is to be understood that mouthpieces are most often made of a transparent or semi-transparent structure but may also be made of an opaque structure. The absence of the term "typically" – according to the translation deemed correct by

the defendant ('TP-12') – would make the meaning of the teaching of para. [0005] of 'Lee' even stronger, since it would be understood that all the mouthpieces must be made of a transparent or semi-transparent structure. This would strengthen the arguments of the claimant which rely on the fact that 'Lee' discloses mouthpieces made of transparent or semi-transparent structure, rather than those of the defendant

The patent at issue.

41. The patent at issue contains 9 claims in which claim 1 is an independent claim and claims 2 to 9 are dependent on claim 1. Claim 1 relates to a vaporizer (also referred to as electronic cigarette).
42. 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. [0002]).
43. 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. [0003]).
44. As suggested by the defendant claim 1 of the patent at issue may be structured as follows:
 - (1.1) A vaporizer device comprising:
 - (1.2) a battery portion (100), the battery portion (100) having a first end (102A) and a second end (104A)
 - (1.2.1) and comprising:
 - an outer shell (106) for covering or protecting one or more of the components of the battery portion (100);
 - (1.2.2) a battery housing segment (102) proximate the first end (102A) of the battery portion (100);
 - (1.2.3) a cartomizer receiving segment (104) proximate the second end (104A) of the battery portion (100),
 - (1.2.4) wherein the outer shell (106) is commonly shared by the battery housing segment (102) and the cartomizer receiving segment (104),
 - (1.2.5) wherein a cartomizer chamber (108) is provided within at least a portion of the cartomizer receiving segment (104), the chamber (108) having an insertion end distal to the battery housing segment (102) and a base end proximate to the battery housing segment (102); and

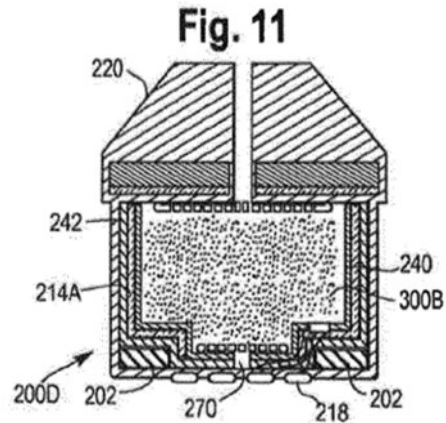
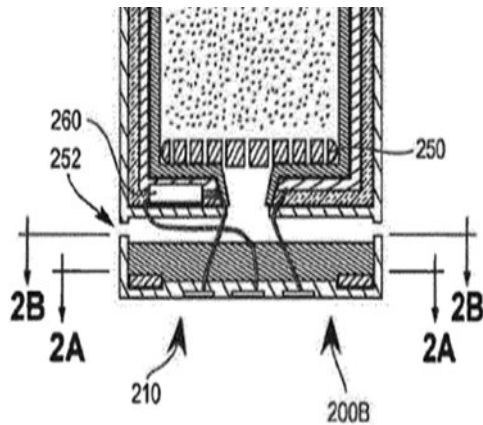
- (1.3) a cartomizer (200) insertable into the chamber (108) at the insertion end of the chamber (108), the cartomizer (200) having a mouthpiece end (212) and an insertion end (210) defined opposite the mouthpiece end, the cartomizer (200A) comprising:
 - (1.3.1) a cartomizer body (208) configured to hold a fluid vaporizable substance, wherein at least a portion of the cartomizer body (208) comprises a translucent material configured to allow viewing of the fluid vaporizable substance, wherein the cartomizer body (208) is configured for insertion into the chamber (108);
 - (1.3.2) a heating element (214) and a wicking element (216) within the cartomizer body (208), wherein the heating element (214) is configured to heat the fluid vaporizable material;
 - (1.3.3) an inhalation tube (222) in fluid communication with the heating element (214) and the wicking element (216);
 - (1.3.4) a mouthpiece (220) at or proximate to the mouthpiece end (212), the mouthpiece (220) in fluid communication with the inhalation tube (222),
 - (1.3.5) the mouthpiece (220) extending from the insertion end of the chamber (108) when the cartomizer (200) is inserted in the chamber (108);
 - (1.3.6) a plurality of cartomizer electrical contacts (218) on an exterior of the insertion end (210), and
 - (1.3.7) cartomizer electrical circuitry operable to direct an electronic current between the cartomizer electrical contacts (218) and the heating element (214);
- (1.4) a battery (110) housed within the battery housing segment (102);
- (1.5) battery electrical contacts provided between the base end of the chamber and the battery housing segment (102), the battery electrical contacts positioned to contact the cartomizer electrical contacts (218) when the cartomizer (200) is inserted in the chamber (108);
- (1.6) and battery electrical circuitry housed within the battery housing segment (102) and operable to direct an electrical current between the battery (110), the battery electrical contacts, the cartomizer electrical contacts, the heating element (214) and the inserted cartomizer (200).

45. 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).

46. 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.

47. 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.
48. 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.
49. Firstly, with regard to feature (1.3.6) that specifies that the cartomizer includes a plurality of cartomizer electrical contacts on an exterior of the insertion end, the skilled person understands this feature in conjunction with feature (1.5) that specifies the battery electrical contacts to be provided between the base end of the chamber and the battery housing segment and 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 (1.3.6) 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 insertion end, any design of cartomizer electrical contacts on the insertion end of the cartomizer that – in dependence and conjunction with a particular design of the battery electrical contacts – may provide the contact specified in feature (1.5) falls under the design rule of feature (1.3.6).
50. 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 insertion end 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 insertion end surface of the cartomizer.



51. Secondly, feature (1.3.4) specifies that the cartomizer includes a mouthpiece in fluid communication with an inhalation tube. 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.
52. The claimant argues that it is axiomatic that a component cannot be in fluid communication with itself, and if the mouthpiece were only a portion of the cartomizer body, it could not be in fluid communication with the inhalation tube within the cartomizer body and would therefore be incapable of embodying this feature. 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.
53. Lastly, claim 1 in feature (1.3.1) provides a functional definition according to which at least a portion of the cartomizer body is to comprise a translucent material configured to allow viewing of the fluid vaporizable substance. This feature needs to be seen in conjunction with the remainder of claim 1 and particularly in conjunction with the particular type of cartomizer that claim 1 refers to. The vaporizer of claim 1 is limited to the use of a cartomizer that has a particularly designed cartomizer body, a particularly designed heating element and wicking element as well as a particular inhalation tube, a particular mouthpiece, particular cartomizer contacts and a particular cartomizer electrical circuitry. All these aspects need to be incorporated in the cartomizer and provide structural limitations on how the cartomizer can be designed. Within such a particular cartomizer, the claimed vaporizer wants the cartomizer body and the way the fluid vaporizable substance is held in that cartomizer body to be designed such that making at least a portion of the cartomizer body to comprise a translucent material makes it possible to view the fluid vaporizable substance.
54. The cartomizer body is configured to hold a fluid vaporizable substance and configured for insertion into the chamber, which has influence on the geometric shape of the cartomizer and the need for a design that allows the fluid vaporizable substance to be held. The heating element and the wicking element are within the cartomizer body, wherein the heating element is configured to heat the fluid vaporizable material, which provides limitations on the spatial arrangement of elements within the cartomizer. The inhalation tube is in fluid communication with the heating element and the wicking element, providing an additional limitation on the

spatial arrangement of parts within the cartomizer. The mouthpiece is at or proximate to the mouthpiece end and in fluid communication with the inhalation tube, while it further needs to be accommodated that the mouthpiece extends from the insertion end of the chamber when the cartomizer is inserted in the chamber, all three issues translating into yet more specific geometric requirements to the design of the cartomizer and further limitations on the spatial arrangement of elements within the cartomizer. The plurality of cartomizer electrical contacts is on an exterior of the insertion end, while cartomizer electrical circuitry is operable to direct an electronic current between the cartomizer electrical contacts and the heating element, which yet again requires the cartomizer to be adopted for implementation of these features. Within such a particular cartomizer, the claimed vaporizer wants the cartomizer body and the way the fluid vaporizable substance is held in that cartomizer body to be designed such that making at least a portion of the cartomizer body to comprise a translucent material makes it possible to view the fluid vaporizable substance.

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

55. The claimant argues that claim 1 lacks an inventive step over “Cross’ combined with ‘Lee’ and/or common general knowledge and also over ‘Pan’ combined with ‘Lee’ and/or common general knowledge.
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 a product 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. [0014] generally states that at least a portion of the cartomizer body is composed of a translucent material. In relation to a particular embodiment, para. [0023] describes at least a portion of body 208 may be composed of translucent or substantially translucent material, such as glass or plastic, so that a user may see fluid 300A held within.
59. Given this background the underlying problem of the invention is to be seen to develop a vaporizer that has a cartomizer with a cartomizer body and a battery portion with a cartomizer chamber provided in at least a portion of a cartomizer receiving segment of the battery portion,

the cartomizer being of the particular design that it has a cartomizer body configured to hold a fluid vaporizable substance and configured for insertion into the chamber, while a heating element and a wicking element are arranged within this cartomizer body, the heating element being configured to heat the fluid vaporizable material, and the cartomizer further comprising an inhalation tube in fluid communication with the heating element and the wicking element, a mouthpiece at or proximate to the mouthpiece end, the mouthpiece in fluid communication with the inhalation tube, the mouthpiece being designed to extend from the insertion end of the chamber when the cartomizer is inserted in the chamber, while a plurality of cartomizer electrical contacts are provided on an exterior of the insertion end with cartomizer electrical circuitry being operable to direct an electronic current between the cartomizer electrical contacts and the heating element in such a manner that the fluid vaporizable substance in the cartomizer body can be viewed.

60. What the claimed invention aims to achieve is very much limited to the specific described structure of the cartomizer used, as the claimed invention is linked to and at the same time limited to vaporizers that use the particular cartomizers. Defining within the underlying problem the particular design of the cartomizer, 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. 174 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 is of the opinion that the teachings disclosed in 'Pan', combined with 'Lee', are a suitable starting point in the assessment of the inventive step.
63. The claimant considers that the skilled person starting from 'Pan' and seeking to facilitate the consumer's determination of how much vaporizable substance is present when viewing the cartridge would be motivated to provide a translucent portion in the cartomizer. In this regard the claimant points out that translucent cartridges 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'.
64. 'Pan' relates to an electronic cigarette and discloses a vaporizer with all features of the claimed invention with the exception of the feature (1.3.1). Actually, the defendant does not explicitly contest that 'Pan' describes a vaporizer with the features (1.1), (1.2), (1.2.1), (1.2.2), (1.2.3), (1.2.4), (1.2.5) (1.3), (1.3.2), (1.3.3), (1.3.4), (1.3.5), (1.3.7), (1.4), (1.6).
65. For completeness, it may be noted that 'Pan' shows an electronic cigarette [see para. 0002], that has an inhale tube 10 (a battery portion), which is an outer shell that is commonly shared by a part, in which the electric power source 5 (a battery) is arranged (a battery housing portion) and covered and protected by the outer shell, and a part into which the integrated electronic atomizer (a cartomizer) 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 inhaler tube 10 (see para. [0037] and Figs. 5 and 7). At one end of the integrated electronic atomizer a mouthpiece is arranged (see Fig. 3), that extends from the open-ended chamber, when the electric power source 5 is inserted in the inhaler tube 10 (Fig. 7). Furthermore, para. [0029] describes the liquid container 261, hence configuring the cartomizer body to hold a vaporizable substance, while para. [0012] describes the functioning of an electric heat wire and a heat equalizer with absorbed liquid from the liquid-container, which are a heating element and a wicking element within the cartomizer body. Fig. 3 shows an inhalation tube arranged proximate to and in flow communication with the hole in the mouthpiece and extending downward, that is in fluid communication with the electric heat wire and the heat equalizer. Lastly, paras. [0012] and [0037] describe the electric connections and how the battery electrical circuitry housed within the battery housing segment is operable to direct an electrical current between the battery (electric power source 5), the battery electrical contacts (DC plug-socket type), the cartomizer electrical contacts (DC plug 21), the heating element and the inserted cartomizer. All this gives evidence that features (1.1), (1.2), (1.2.1), (1.2.2), 1.2.3), (1.2.4), (1.2.5) (1.3), (1.3.2), (1.3.3), (1.3.4), (1.3.5), (1.4), (1.6) are disclosed in 'Pan'.

66. Regarding feature (1.3.6) 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 is understood to provide electrical contacts (in the plural) (see paras. [0029], [0033] and [0037] and Figs. 3, 5 and 7).

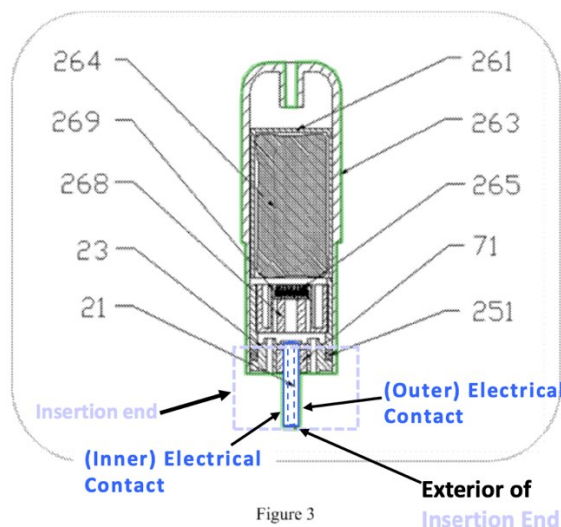


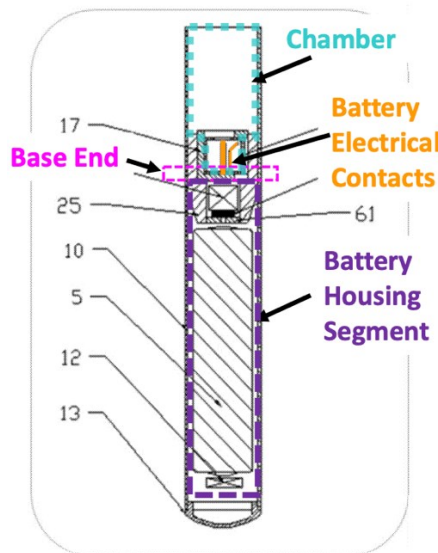
Figure 3

67. A pin of the DC plug of the cartomizer (the electronic atomizer in 'Pan') protrudes from its bottom end. 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 a plurality of cartomizer electrical contacts on an exterior of an insertion end of the cartomizer. From the arrangement of the DC plug described in 'Pan' in para. [0029] and the operational behaviour described in para. [0012], the skilled person understands a cartomizer electrical circuitry to be operable in the

electronic atomizer of 'Pan' to direct an electronic current between the DC plug and the heating element (feature (1.3.7)).

68. Paras. [0033] and [0037] together with Fig. 5 and 7 describe that the battery portion in 'Pan' (the electronic inhaler in the patent at issue) has a DC plug-socket type (below an annotated copy of Fig. 5 as provided by the claimant is reproduced). This DC plug-socket type forms (part of) a battery electrical contacts that is provided between the base end of the chamber and the battery housing segment and is positioned to contact the DC plug 21 (the cartomizer electrical contacts) when the electronic atomizer is inserted in the electronic inhaler. It follows that feature (1.5) is also disclosed in 'Pan'.

69. Defendant's argument as regard to feature (1.5), which is primarily based on the use of the plural in the term "battery electrical contacts" does not convince. As highlighted in the annotated copy of Fig. 5 below, the skilled person understands the DC plug-socket type to have a positive connection and a negative connection and hence contacts (in the plural); one being the central pin highlighted in orange, one being the further object arranged to the right of the central pin and also highlighted in orange in the annotated Fig. 5 below.



70. Both parties agree that 'Pan' does not disclose the part of feature (1.3.1) that concerns at least a portion of the cartomizer body to comprise a translucent material configured to allow viewing of the fluid vaporizable substance.

71. The claimant argues that the provision of a cartomizer body that includes a translucent portion would be obvious and points out that translucent cartridges 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 and refers to 'Lee' and to fountain pens, as well as, further documents filed with the reply to defence to further support the claimed common general knowledge, consisting of U.S. Patent Application Publication No. 2013/0168880 ('Duke', 'MWE 35'), U.S. Patent Application Publication No. 2013/0192623 ('Tucker', 'MWE 36') and Chinese Publication No. CN100593982C (Technical Institute of Physics and Chemistry of CAS, 'CAS', 'MWE 37' and 'MWE 37a').

72. The Court acknowledge that this statement is correct for the type of cartridges referred to by the claimant. Nevertheless, this would not guide the skilled person to make the wall of the atomizer tube 263 in 'Pan' translucent. Indeed, while 'Pan' is similar to the vaporizer of claim 1 in that it uses the same particular cartomizer as the claimed vaporizer (which is also, why 'Pan' provides a good starting point for the evaluation of inventive step), 'Pan' at the same time shows that the mere measure of making at least a part of the cartomizer body (the atomizer tube 263) to comprise a translucent portion does not automatically lead to allowing the fluid vaporizable substance to be viewed. As highlighted by the defendant, 'Pan' discloses that the liquid container 261 (which is arranged as a separate element inside the atomizer tube 263) includes liquid-storing media 264 that is made of cotton filled with liquids. As a result, making a portion of the atomizer tube 263 translucent would not allow a user to view the vaporizable liquid within the cartomizer. Even if the atomizer tube 263 were made partially transparent (and not only translucent), a user would – at most – see the outside of the liquid container 261.
73. In addition, since – as defendant also rightly points out – 'Pan' discloses in para. [0027] a side-space for airflow between the liquid container 261 and the liquid storing media 264. Such a side-space for airflow or an airflow through the liquid-storing media 264 in general would cause the internal surface of the liquid container 261 to become dirty during use, thereby inhibiting the visibility of the chamber from outside the shell. Therefore, making a portion of the atomizer tube 263 translucent would not be a solution that the skilled person would consider in the attempt to allow viewing of the fluid vaporizable substance.
74. In conclusion, starting from 'Pan' it was not obvious to suggest the claimed vaporizer, because neither the common general knowledge claimed by the claimant, nor 'Lee' would provide the skilled person with guidance on how making at least a portion of the cartomizer body (of the atomizer tube 263) could be used to allow viewing of the fluid vaporizable substance.
75. It may be added that as far as claimant intended to use the combination of 'Pan' with either 'Duke', 'Tucker' or 'CAS' as individual line of argument and outside the line of argument based on common general knowledge as raised in the statement for revocation, such an individual line of argument is considered late filed by the Court as it was not raised in the statement for revocation, but only in the reply to the defence and hence must be disregarded.

Claim 1. Lack of inventive step: b) 'Cross' as a starting point and common general knowledge or 'Lee'.

76. The claimant argues that claim 1 lacks an inventive step over 'Cross' combined with common general knowledge and/or 'Lee'.
77. As previously mentioned, in order to assess whether or not a claimed invention lacks inventive step, it is first necessary to determine one or more realistic starting points in the state of the art which would be of interest to a person skilled in the art who, at the priority date of the patent in suit, was seeking to develop a product or process similar to that disclosed in the prior art.
78. In particular, realistic starting points are the documents which disclose the main relevant features as those disclosed in the challenged patent or which address the same or a similar underlying problem.

79. Against this background, 'Cross' is not a suitable starting point for the evaluation of inventive step.

80. 'Cross' relates to the vaporisation of dry, solid vaporizable substance, which is provided as a coating on the respective heating element (the individual support of the series of supports 78 in 'Cross'; see Fig. 3 below). Claimant's references to liquids mentioned in paras. [0069] and [0092] do not change this evaluation. Here, 'Cross' describes production methods used to produce the device, namely methods for applying the substance onto the respective support of the series of supports 78 (the heating element) by way of brushing, dip coating, spray coating, screen printing, roller coating, inkjet printing, vapor-phase deposition or spin coating. For these production methods the substance to be applied temporarily needs to be made liquid itself or dissolved in a liquid. In the course of production, the applied substance dries out, however, and in the device described is present as a dry, solid substance. This is already obvious from the device being a consumer product that needs to be designed to be held or carried in any kind of orientation (even upside down), making a liquid vaporizable substance unsuitable as this would leave the heating elements if the device was held upside down. The need for the substance to be solid and dry in 'Cross' is also obvious as otherwise the substance may flow from one support to a neighbouring support, ruining the intended vaporization of a specific dose of substance per application, which can only be achieved, if this specific dose is present as a dry substance on the respective support.

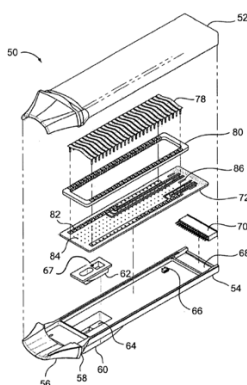


FIG. 3

81. Because 'Cross' lacks a fluid vaporizable substance, it is evident that its structural and functional main features diverge from those disclosed in the patent at issue and also that the issue of allowing the user to view a fluid vaporizable substance, which is the underlying problem addressed by this later patent, does not arise.

82. Even if 'Cross' were taken as a starting point, the Court does not consider that it would be obvious for as skilled person to amend the solution of 'Cross' such that at least a portion of the cartomizer body (which in 'Cross' is the cartridge) would comprise a translucent material configured to allow viewing of the fluid vaporizable substance.

83. Firstly, the Court is not convinced that it would be possible to view the vaporizable substance on the supports inside the cartridge, even if the cartridge were transparent. Thus, there is a lack of motivation to make the cartridge transparent for the purpose of viewing a fluid vaporizable

substance. The supports are described to be fabricated from 0.0005-inch-thick stainless-steel foils having a surface area of 0.2 cm² and hence far too small to be reliably observed. Secondly, by way of the display 162 'Cross' already comprises means for monitoring the applied doses that operates much more precisely than trying to see the substance on the minute sized supports. The skilled person would not be motivated to do away with the already existing means for monitoring in favour of a less reliable method. Stating the opposite is an argument made in hindsight. Thirdly, as can be seen from Fig. 7 inserted below, in 'Cross' the part of the cartridge that contains the substance on the heating element is fully arranged inside the dispensing unit. Even if the cartridge were translucent, the user would not be able to look inside the cartridge in the inbuilt state of the cartridge. Hence the skilled person lacks motivation to make the cartridge translucent.

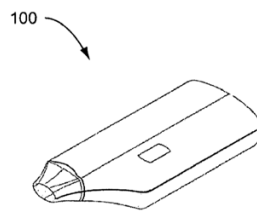


FIG. 7

84. In summary, the arguments presented by claimant starting from 'Cross' have not convinced the Court that it would have been obvious to suggest the claimed vaporizer, regardless of 'Cross' being combined with an alleged common general knowledge or with 'Lee'.
85. Finally, as stated in para. 75, it is not possible to consider 'Cross' with either 'Duke', 'Tucker' or 'CAS' as individual line of argument and outside the line of argument based on common general knowledge as late filed.

Conclusions.

86. For these reasons, the grounds for invalidity raised by the claimant against the patent at issue and addressed by the panel are not well founded and any arguments of the parties which have not been specifically considered must be deemed absorbed.
87. Therefore, patent EP '092 shall be maintained as granted.

Costs

88. The costs of the Court and of the defendant shall be borne by the claimant, as the unsuccessful party.
89. 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) **dismisses the revocation action filed by NJOY Netherlands B.V. against VMR Products LLC concerning the European patent EP 3 626 092 B1.**
- b) **maintains European patent EP 3 626 092 B1 as granted.**
- c) **orders that the costs of the proceedings shall be borne by the defendant.**

Issued on 21 January 2025.

Presiding judge and judge-rapporteur

Paolo Catallozzi

**Paolo
Catallozzi** Firmato digitalmente
da Paolo Catallozzi
Data: 2025.01.21
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Legally qualified judge

Tatyana Zhilova

**Tatyana
Zhilova** Signature
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Date : 2025.01.21
16:47:05 +01'00'

Technically qualified judge

Max Tilmann

**Max
Wilhelm
Tilmann** Digital unterschrieben
von Max Wilhelm
Tilmann
Datum: 2025.01.21
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Clerk

Margaux Grondein

 Signature numérique
de MARGAUX MARIE-
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Date : 2025.01.21
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ORDER DETAILS

Order no. ORD_598528/2023 in ACTION NUMBER: ACT_571745/2023

UPC number: UPC_CFI_311/2023

Action type: Revocation Action

Related proceeding no. Not provided Not provided

Not provided Not provided