

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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RJ Brands, LLC, d/b/a CHEFMAN,

Petitioner

v.

SharkNinja Operating LLC,

Patent Owner

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Case IPR2025-01529

U.S. Patent No. 11,389,026

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**Declaration of David Smith**

**in Support of Petition for *Inter Partes* Review of**

**U.S. Patent No. 11,389,026**

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## I. INTRODUCTION

I, David Smith, declare as follows:

1. My name is David Smith. I have been retained by counsel for Patent Owner as a technical expert in the above-captioned Inter Partes Review (“IPR”) matter. Specifically, I have been asked to study and provide my opinions on the technology described and claimed by U.S. Patent Nos. 11,389,026 (the “’026 Patent”). I understand that the Challenged Claims are claims 1-4 and 7-20 of the ’026 Patent. My opinions in this Declaration are limited to those Challenged Claims.

2. My compensation in this matter is not based on the substance of my opinions or the outcome of this matter. I have no financial interest in the Petitioner. Alpine Engineering & Design bills my time at an hourly rate of \$400 for my analysis and testimony in this case.

## II. QUALIFICATIONS

3. A copy of my Curriculum Vitae is attached to my declaration in this proceeding. It includes details of my education, professional, and employment credentials. Further experience with kitchen appliances, cooking devices and other electromechanical products is laid out below.

4. I am currently the President of Alpine Engineering & Design, Inc. I am a registered Professional Mechanical Engineer in the States of Utah and Idaho. I am also a Certified Safety Professional in comprehensive practice. I received my Bachelor of Science degree in Mechanical Engineering from Brigham Young

University - Idaho, in 2007. I received a Master of Science Degree in Mechanical Engineering and a Master of Business Administration (MBA), with an emphasis in Product Development, from Brigham Young University in 2011. I have approximately 15 years of experience in the fields of mechanical engineering, product development, mechanical design, and much of this design work has involved industrial and consumer products. In my role as a consultant, I have worked on numerous appliance products, including pressure cookers, heating appliances, baby bottle warmers, smokers, ice makers, coffee makers, grinders, blenders, electronic kiosks, electronically controlled exercise machines and the like.

5. I am a named inventor on 7 U.S. patents with a number of other patent applications pending. A list of my patents is appended with my CV. I have significant experience with the patent process.

6. My experience of over 20 years in academic and practical situations as well as my hands-on experience, has given me a detailed appreciation of the technology involved with the '026 Patent.

### III. MATERIALS CONSIDERED

7. In writing this Declaration, I have considered the following: my own knowledge and experience, including my work and consulting experience in the above fields; and my experience in working with others involved in those fields. I have also reviewed the exhibits filed with the Petition. Among the references

considered are the '026 Patent (EX1001), the File History of U.S. Patent Application 17/219,238 that issued as the '026 Patent (EX1004); U.S. Provisional Application No. 62/874,193 (the '193 Provisional Application)(EX1005); the file history of the 'of U.S. Patent Application No. 17/159,414 ("the '414 Parent Application")(EX1006); the file history of U.S. Patent No. 11,672,377 ("the '377 Continuation Patent")(EX1007); PCT Publication No. WO2021011642A1 ("the '642 PCT")(EX1008); Chinese Utility Model Patent No. CN110664270A ("Zhang") and corresponding Certified English Translation (EX1010); Chinese Utility Model Patent No. CN210354396U ("Guo") with Certified English Translation (EX1011); PCT Publication No. WO2018095949A1 ("Philips")(EX1012); US Publication No. 2017/0231430A1 ("Moon")(EX1013); PCT Publication No. WO2019068193A1 ("Conrad")(EX1014); U.S. Patent Application Publication No. 2017/0245686A1 ("Man")(EX1015); U.S. Patent Application Publication No. 2014/0366746A1 ("Tsai")(EX1016); and U.S. Patent No. 7,708,008 ("Elkasevic")(EX1017). To the extent not listed, I have reviewed all documents cited or referenced within my declaration.

8. I have also relied upon my experience, education, and knowledge in the relevant art. In formulating my opinion, I have considered the viewpoint of a person of ordinary skill in the art ("POSITA").

#### **IV. LEGAL FRAMEWORK**

**A. Patent Validity**

9. I have been informed by counsel for Petitioner that the following legal principles apply to an analysis of patentability based on 35 U.S.C. §102 and 35 U.S.C. §103 for obviousness. I have also been informed that, in an *inter partes* review proceeding such as this proceeding, to render a patent claim unpatentable, Petitioner must show by a preponderance of the evidence that the claim would have been anticipated or rendered obvious by one or more properly combined prior art patents or publications.

10. I am not a lawyer and will not provide any legal opinions. Although I am not a lawyer, I have been informed and understand that certain legal standards are to be applied by technical experts in forming opinions regarding the meaning and validity of patent claims.

11. I have been informed and understand that, to anticipate a claim under 35 U.S.C. § 102, a reference must teach every element of the claim either expressly or inherently to a person having ordinary skill in the relevant art. I have been informed and understand that an anticipating reference need not use the exact terms of the claims, but must describe the patented subject matter with sufficient clarity and detail to establish that the claimed subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the purported invention. I also have been informed and understand that an anticipating

reference must enable one of ordinary skill in the art to reduce the purported invention to practice without undue experimentation.

12. Further, I have been informed and understand that a patent claim is not patentable under 35 U.S.C. § 103 if the differences between the patent claim and the prior art are such that the claimed subject matter as a whole would have been obvious at the time the claimed invention was made to a person having ordinary skill in the relevant art.

13. I have been informed and understand that to render a claim obvious, a combination of prior art references or embodiments from a single reference must disclose each claim element of that claim, and that obviousness is a question of law based on the underlying facts. I understand that the underlying factual inquiries are: (1) the scope and content of the prior art, (2) the differences between the prior art and the claims at issue, (3) the level of ordinary skill in the pertinent art, and (4) secondary considerations of non-obviousness.

14. I am also informed and understand that the fact that all of the elements of a claimed invention can be found separately in more than one prior art reference is not sufficient to warrant a finding that a claimed invention is obvious. There must be a reason why it would have been obvious to modify or combine the prior art to arrive at the claimed invention. I understand that a helpful insight into this determination is whether there is a teaching, suggestion or motivation in the prior art

that would lead one of ordinary skill in the art to combine the elements. When there is no suggestion for the proposed combination, or when the prior art suggests something other than the combination, a finding of obviousness is generally not warranted.

15. I have been informed and understand that there are recognized, exemplary, rationales for combining or modifying references to show obviousness of claimed subject matter. Some of the rationales include the following: combining prior art elements according to known methods to yield predictable results; simple substitution of one known element for another to yield predictable results; use of a known technique to improve a similar device (method or product) in the same way; applying a known technique to a known device (method or product) ready for improvement to yield predictable results; choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art; and some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art teachings to arrive at the claimed invention.

16. I also have been informed and understand that even if one can demonstrate a reason to combine references, a prima facie case of obviousness cannot be shown without a reasonable expectation of success, which is determined at the time the invention was made. I also understand that for a finding of obviousness, at least some degree of predictability is required when considering a combination of references.

17. I have been informed and understand that a precise teaching in the prior art directed to the subject matter of the claimed invention is not needed. I have been informed that one may take into account the inferences and creative steps that a person of ordinary skill in the art would have employed in reviewing the prior art at the time of the invention. For example, if the claimed invention combined elements known in the prior art and the combination yielded results that were predictable to a person of ordinary skill in the art at the time of the invention, then this evidence would make it more likely that the claim was obvious. On the other hand, if the combination of known elements yielded unexpected or unpredictable results, or if the prior art teaches away from combining the known elements, then this evidence would make it more likely that the claim that successfully combined those elements was not obvious.

18. I have been informed and understand that prior art must be considered in its entirety, including disclosures that teach away from the claimed invention.

Furthermore, if a proposed modification to a prior art reference would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

19. I have been informed and understand that the pertinent obviousness inquiry takes place at the time of the invention. Therefore, the use of hindsight in an obviousness analysis is impermissible.

20. I have been informed and understand that whether there are any relevant differences between the prior art and the claimed invention is to be analyzed from the view of a person of ordinary skill in the relevant art at the time of the invention. As such, my opinions below as to a person of ordinary skill in the art are as of the time of the invention, even if not expressly stated as such; for example, even if stated in the present tense.

## **B. Patent Priority**

21. I have been informed and understand that later-filed patent applications may claim priority to one or more earlier-filed patent applications, such as non-provisional patent applications that claim priority to earlier-filed provisional patent applications. However, for the later-filed patent to benefit from such priority claim, the priority patent application must support the claimed subject matter by establishing that the disclosure of the application relied upon reasonably conveys to

those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.

**C. Level of a Person of Ordinary Skill in the Art**

22. I was asked to provide my opinion as to the level of skill of a person of ordinary skill in the art (“POSITA”) of the ’026 Patent at the priority date of the claimed invention, which I considered to be July 15, 2020 for reasons discussed below, not the date of the ’193 Provisional Application. My opinions herein are not altered should the priority date instead be the date of the ’193 Provisional Application, July 15, 2019. For example, my opinions in Ground 3, discussed below, are not impacted by priority date as the references therein are prior art even under a July 15, 2019 priority date.

23. In determining the characteristics of a hypothetical POSITA of the ’026 Patent, I considered several factors, including the type of problems encountered in the art, the solutions to those problems, the rapidity with which innovations are made in the field, the sophistication of the technology, and the education level of active workers in the field. I also placed myself back in the time frame of the claimed invention and considered the colleagues with whom I had worked at that time.

24. In my opinion, a POSITA as of the earliest applicable priority date for the ’026 patent would have had at least a bachelor’s degree in mechanical engineering, industrial design, product design, or electrical engineering (or an

equivalent field) or at least two years of work experience involving research and development or new product development of cooking devices, electronic enclosures, or kitchen appliances. More education can supplement practical experience and vice versa. Such a POSITA would have been capable of understanding the '026 Patent and the prior art references discussed herein. As illustrated in my CV, I had more than ordinary skill in the art as of the priority date of the patent. However, I apply the level of ordinary skill throughout this declaration. My opinions provided in this declaration would not change in view of minor modifications to this level of ordinary skill.

## V. PRIORITY OF THE '026 PATENT

### A. **Priority Claim**

25. The '026 patent was filed on March 31, 2021 as a continuation application of U.S. Patent Application No. 17/159,414 (“the '414 Parent Application”), which was a national stage of PCT Application No. PCT/US2020/042120, filed on July 15, 2020, and published as PCT Publication No. WO2021011642A1 (“the '642 PCT”). The '642 PCT claimed priority to U.S. Provisional Application No. 62/874,193 (“the '193 Provisional Application”), filed July 15, 2019. For the reasons below, it is my opinion that the ‘026 Patent is not entitled to the priority date of the '193 Provisional Application”— July 15, 2019.

Therefore, for purposes of this *inter partes* review, it is my opinion that the earliest priority date could *potentially* be is July 15, 2020. It is my opinion that the disclosure of the '193 Provisional Application does not support the language the first and second cooking containers each forming a continuous outer surface.”

### **B. Specification of the '026 Patent**

26. I have reviewed the specification of the '026 patent, which is directed to a cooking system having a housing with two internal compartments for receiving cooking containers. EX1001 5:28-35. Each of the internal compartments has a heating element and fan. EX1001 5:50-67. The '026 patent provides that the “components associated with operation of each internal compartment, such as the heating element and air movement mechanism are also independently operable and fluidly separate from the components of the adjacent internal compartment.” EX1001 13:32-36. Figures 1-7 are directed to a single compartment air fryer, whereas Figures 8-15 are directed to a dual compartment air fryer. EX1001, 12:65-13:5; FIG. 8-15.; EX1004, pg. 249.

### **C. Prosecution History**

27. On April 14, 2022, the applicant amended the claims after a petition to revive the abandoned application was granted. EX1004, 39-44. These amendments included language that was not previously before the Examiner or in the application. In particular, the amendments for Claim 1 recited “the first and second cooking

containers each forming a *continuous outer surface* with the housing when the first and second cooking containers are inserted into the first and second internal compartments respectively”, with similar amendments to claims 18 and 23. EX1004, 40-43 (emphasis added). The applicant did not provide any specific indication of support for the amendments, instead alleging support “can be found throughout the specification and drawings of the application as filed.” EX1004, 44. Notably, none of Figures 8-14 show the housing, except for a schematic diagram of Fig. 8. It is my opinion that the only potential support<sup>1</sup> for the amendment to include “*continuous outer surface*” is found in FIG. 13.

**D. The '193 Provisional Application Does Not Contain Written Description Support for Forming a Continuous Outer Surface in the Challenged Claims**

28. As discussed above, all challenged claims recite the following newly added feature - the first and second cooking containers each “forming a continuous outer surface” with the housing. EX1001, Claims 1, 11, 16. Similar to the specification of the '026 patent, the '193 provisional application also does not contain the words “continuous” or “outer surface.” Rather, this new language was added in the first instance in a claim amendment after paying the issue fee. EX1004,

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<sup>1</sup> I offer no opinion herein as to whether the subject matter of the '026 patent or PCT Application No. PCT/US2020/042120 supports claim language of “the first and second cooking containers each forming a continuous outer surface”

39-44. It is my opinion that the '193 provisional application does not provide adequate written description for “forming a continuous outer surface.”

29. The '193 provisional application mentions that the “cooking container 32 is slidably received within an opening 34 formed in a wall 36 of the housing 22.” EX1005, ¶[0081]. The opening 34 is only shown in FIGS. 2 and 3, which are both identified as schematic diagrams<sup>2</sup>, without the cooking container 32. EX1005, ¶[0069]-[0070]. The '193 provisional application does state that “a size and shape of the cooking container 32 may be complementary to the size and shape of the opening 34.” EX1005, ¶[0081]. However, to the POSITA, a complementary size and shape provides no information regarding the outer surface of the cooking container 32. Thus, this is not adequate to provide notice to one of ordinary skill that Applicant possessed the feature of the “forming a continuous outer surface” at the time of filing the '193 provisional application.

30. Additionally, due to the election of species and statements made by the Applicant during prosecution, the added language of “forming a continuous outer

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<sup>2</sup> One of skill in the art would understand a schematic drawing is a simplified two-dimensional diagram that represents how parts relate rather than physical appearance. As FIGS. 1-3 of the '193 provisional application are schematic drawings, they do not depict the physical appearance of the outer surfaces.

surface” cannot be based on any of FIGS. 1-7. EX1004, 44. Because the species corresponding to FIGS. 8-15 was selected, the basis for the amendment of “forming a continuous outer surface” must come from these figures, and in particular FIG. 13. FIG. 13, however, was not included in the ’193 provisional. EX1005. Accordingly, it is my opinion that the ’026 Patent is not entitled to the date of the ’193 provisional.

31. Instead of providing any adequate support of “forming a continuous outer surface” the POSITA would understand that the ’193 provisional application provides support for a non-continuous outer surface in FIG. 4. *See* EX1005. The outer surface of the cooking container 32 is the front surface 42, which is not continuous with the housing 22. *See* EX1005, 38, Fig. 4 and [0081].

32. Regarding FIG. 5, the ’193 provisional application describes a front wall 60 that follows the upward slope from the bottom surface 58. *See* EX1005, FIG. 5.

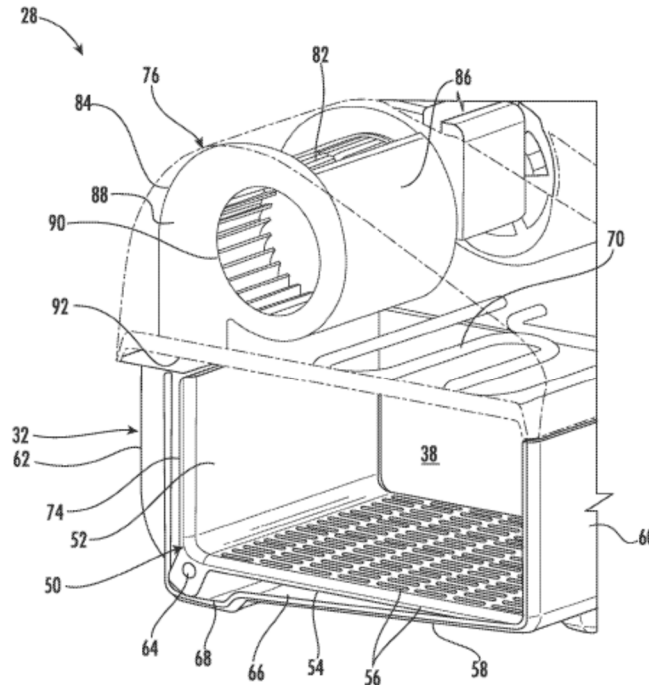


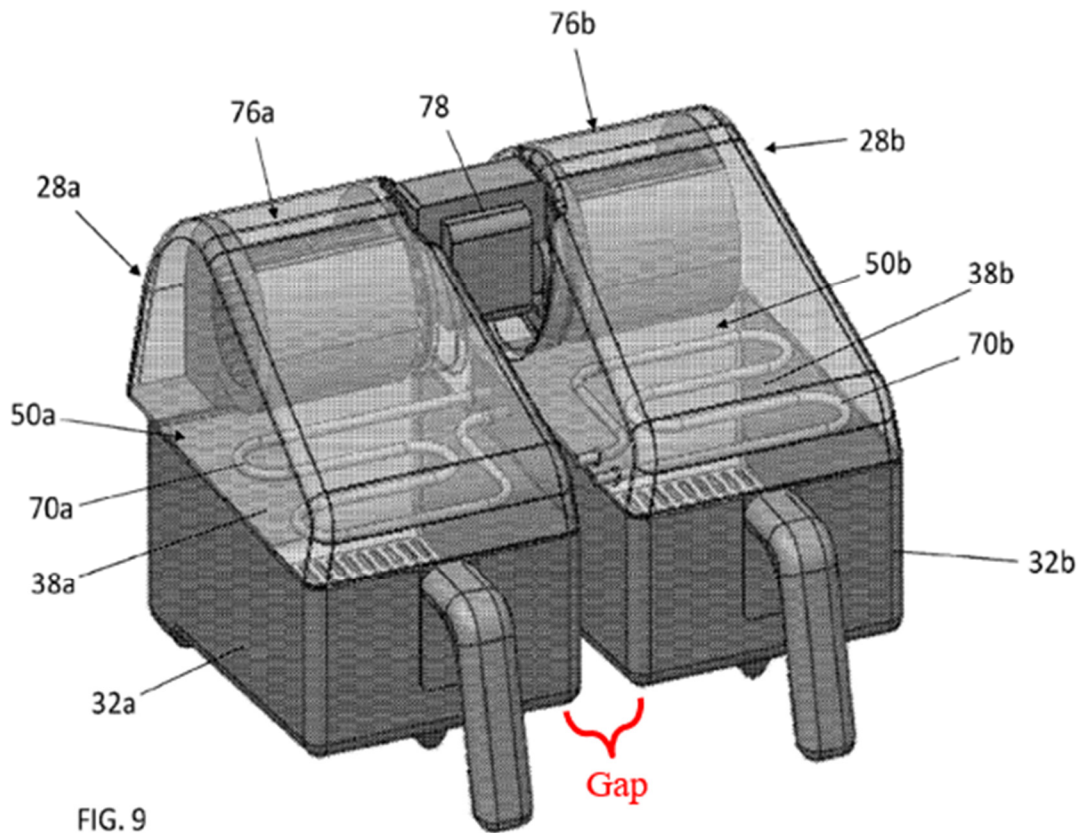
FIG. 5

The POSITA would also consider that this fails to provide adequate support for “forming a continuous outer surface.” First, the front surface 42 is shown on the outermost side of the front wall 60 of Fig. 4 and thus the outer surface of the cooking container 32 is not continuous. Second, the bottom surface 58 is described as the bottom surface of the cooking container 32 and not the housing 22. *See* EX1005, 39, ¶[0085]. Thus, whether or not the front wall 60 follows the upward slope from bottom surface 58 in a continuous manner is irrelevant to the claims.

33. FIGs. 9-11 of the '193 provisional application (and thus the '026 Patent) include a clear gap between its first and second containers 32a, 32b. Moreover, Figs. 9-11 do not show the housing 22 anywhere, in fact it is intentionally not shown. Thus, Fig. 9 (and similarly Fig. 10) either (1) shows a non-contiguous surface (which

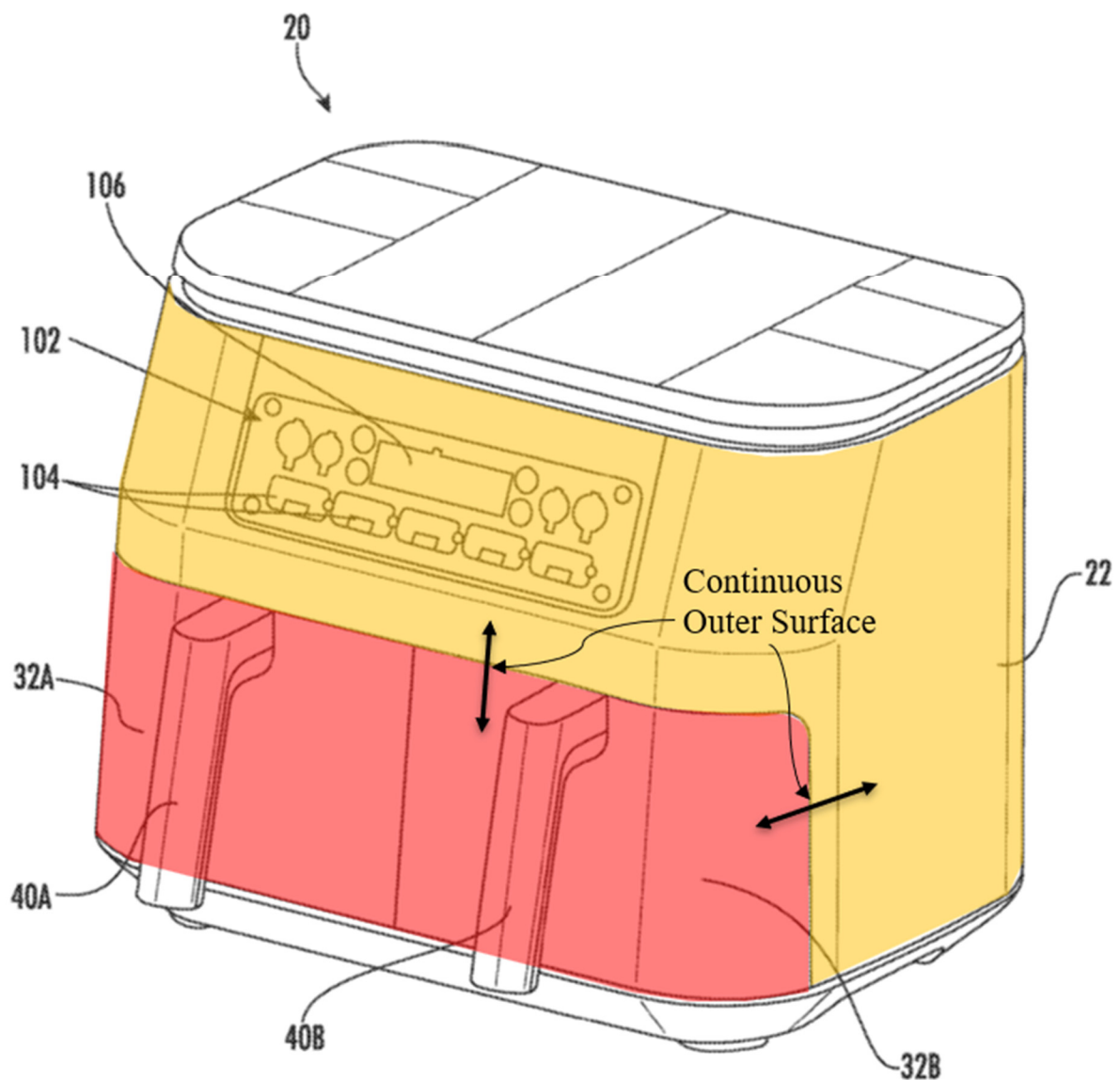
is the opposite of the claimed “continuous outer surface” as there was a clear gap or

(2) Figs. 9-11 and the corresponding portion of the specification cannot support limitation 1[a] stating “a **housing** having a first internal compartment **and** a second internal compartment”. Accordingly, a POSITA would understand that Figs. 9-11 do not support the granted claims of the '026 patent.



34. The clearest difference between the '193 provisional application and the '026 patent is that Applicant added three new figures, including FIG. 13 that provides a perspective view of the cooking system. EX1001, Fig. 13. Annotated FIG. 13, below, shows continuous outer surface as being formed between the cooking

container 32a/32b (red) with the housing 22 (yellow). In view of the election of species, Applicant showed that the support for the new claim feature of “continuous outer surface” was based on FIGS. 8-15, not FIGS. 1-7, and only Figs. 13-15 provide potential support for this language. EX1004, 39-44. Accordingly, it is my opinion that the language of a “continuous outer surface” has no support in the '193 provisional application.



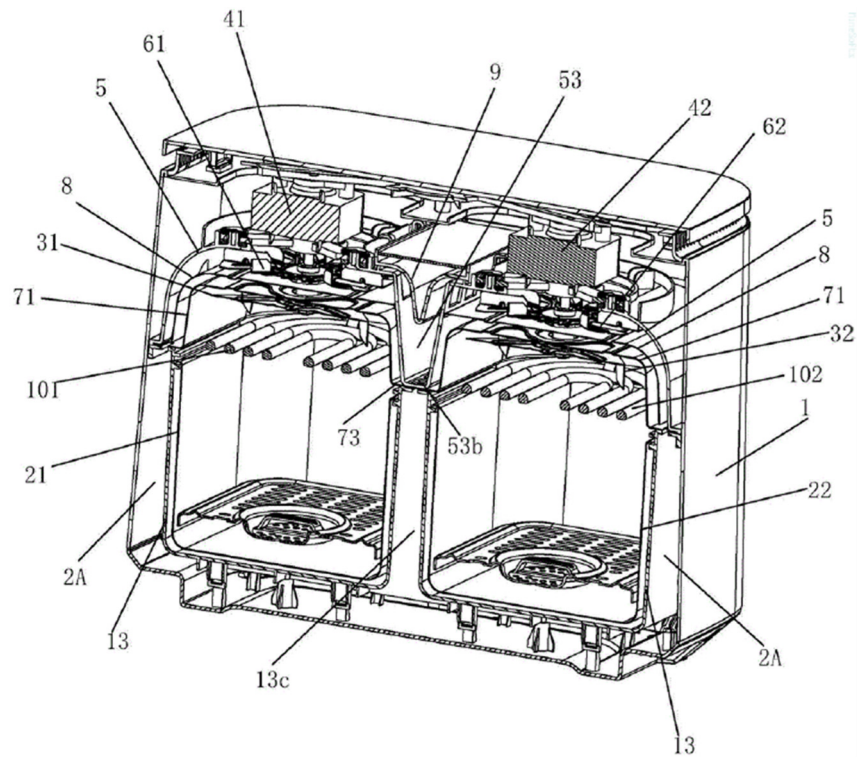
35. Thus, it is my opinion that there is nothing in the '193 provisional application that, to the POSITA, establishes Applicant had possession of the claimed subject matter of “first and second cooking containers each “forming a continuous outer surface” with the housing as claimed. In view of this deficiency, the earliest priority date for the '026 patent that should be used for evaluating the grounds is July 15, 2020.

## **VI. OVERVIEW OF THE PRIOR ART REFERENCES**

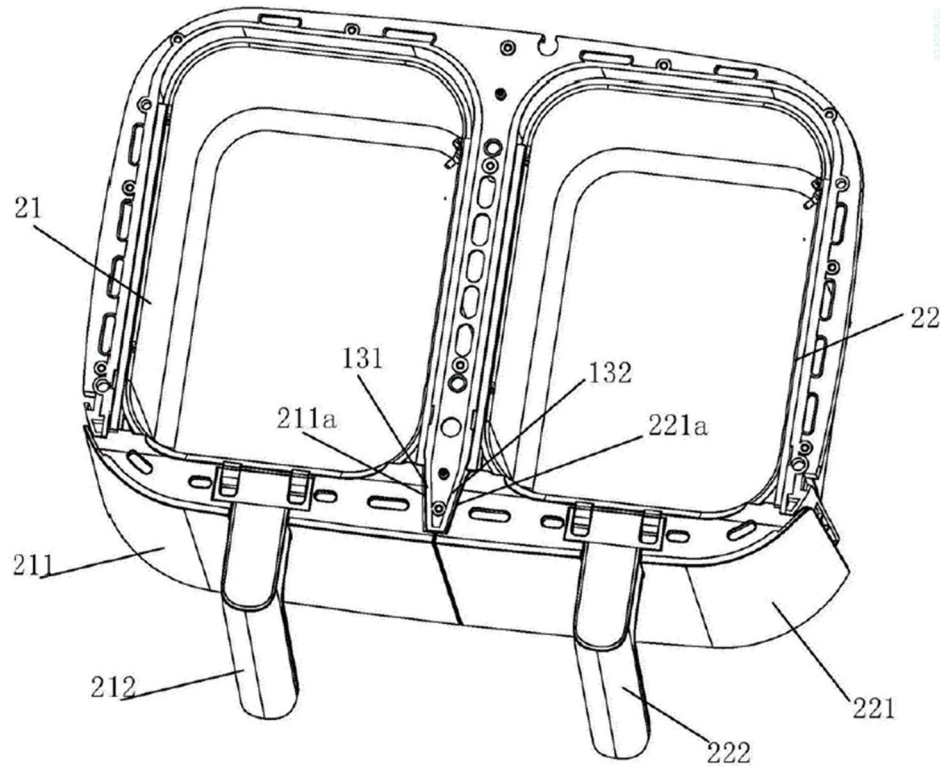
### **A. Zhang (EX1010)**

36. Zhang is a Chinese patent published on January 10, 2020, and is prior art under at least 35 U.S.C. § 102(a)(1) because the '026 patent is not entitled to its provisional filing date as discussed above.

37. Zhang is directed to an air fryer cooking system that can perform two cooking operations using independent pot bodies integrated in one structure. See EX1010, ¶[0005]-[0006], ¶ [0021]. Zhang’s air fryer, shown in Zhang’s Fig. 2 produced below, includes a “main body 1 internally forming a cooking chamber.” Id., ¶[0033].



38. Zhang's air fryer includes "main body 1 is provided with an integrated furnace chamber inner pan 13" that contains "first accommodating chamber 13a and a second accommodating chamber 13b". EX1010, ¶[0034]. Each of the first and second containing chambers 13a, 13b receives a respective one of "a first pot body 21 and a second pot body 22". EX1010, ¶[0033]-[0034].



39. Integrated furnace chamber inner pan 13, shown in Zhang’s Figure 2, reproduced above, includes guide surfaces 131, and 132, shown in Figure 6 above, that operate to guide each respective pot body 21/22 into the respective containing chamber 13a/13b such that, when inserted therein, first and second pot body supports 211, 221 are flush with each other, as well as the main portion of the machine body 1 thereby “enhancing the user experience and improving the aesthetic appearance.” EX1010, ¶[0036].

40. Zhang’s air fryer includes “a first electric heating tube 101 located above the first pot body 21 and a second electric heating tube 102 located above the second pot body 22”. EX1010, ¶[0033]. Above the heating tubes is “first hot air fan 31” coupled to a “first motor 41” and “a second hot fan 32” coupled to “second motor

42”. EX1010, ¶[0037]-[0047]. Zhang describes “During operation of the air fryer of this embodiment, the two hot air fans and the two cold air fans start to rotate at high speed driven by two motors. On one hand, the two hot air fans respectively blow the heat generated by the two electric heating tubes into the interiors of the two pot bodies to heat the food inside the two pot bodies.” EX1010, ¶[0048].

41. Zhang’s system is thereby described as having “by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency” EX1010, ¶[0021].

#### **B. Philips (EX1012)**

42. International Publication WO2014/189185 A1 (hereinafter “Philips”) published on May 31, 2018, is prior art under at least 35 U.S.C. § 102(a)(1). EX1012.

43. Philips discloses a cooking appliance having two separate cooking compartments that can operate independently and simultaneously. Each compartment includes its own heating element and airflow path, enabling the preparation of different food items at the same time without flavor transfer. EX1012 3:10-25; 5:3-20.

44. The two compartments are physically separated by an internal divider, and each contains a respective fan for circulating heated air within that compartment. *Id.*, 6: 5-15; 17, Fig. 2, Fig. 6. This separation allows isolation of airflow, reducing

cross-contamination and maintaining optimal cooking conditions in each. *Id.*, 6:16-28.

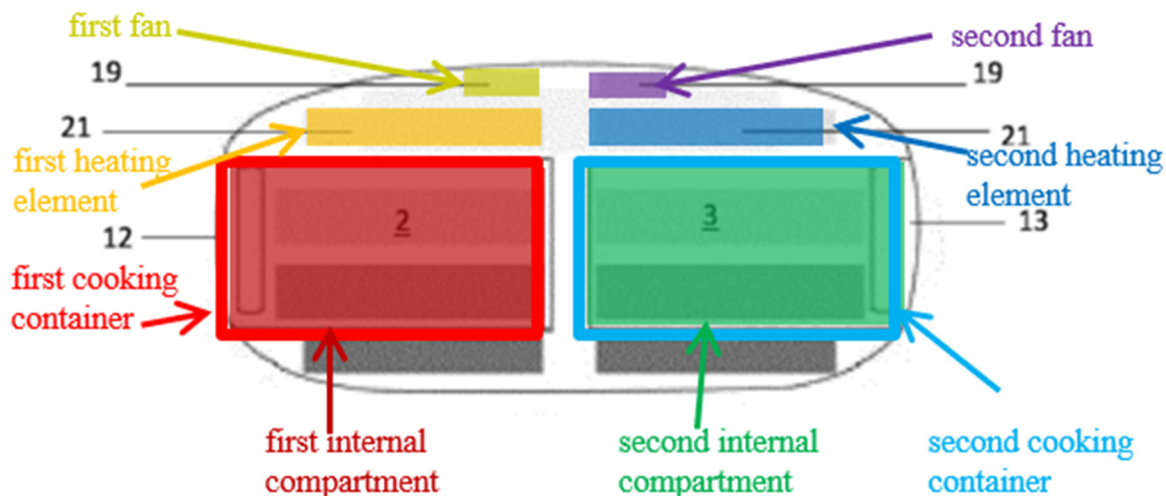


FIG. 6

45. Philips, Fig. 6 annotated and reproduced above, further teaches that each compartment has independent control of cooking time and temperature, enabling different settings for different food types. EX1012, 4:12-30. Control may be achieved via separate user interfaces for each compartment or through a single interface allowing toggling between compartments. *Id.*, 7:1-14.

### C. Moon (EX1013)

46. United States Patent Application Publication No. US 2017/0231430 A1 by Moon (hereinafter “Moon”) published on August 17, 2017, and is prior art under at least 35 U.S.C. § 102(a)(1). EX1013.

47. Moon was filed on February 13, 2017 and discloses an air fryer system comprising a base having a heating source and an air source located therein, both

powered by an AC power cord. EX1013, ¶[0009]. The fryer includes a cooking chamber defined within the base and a cooking drawer which fits securely within the chamber and substantially seals the chamber against heat loss during use. *Id.*, ¶[0009]; ¶[0038].

48. The cooking drawer, in the closed position, forms a continuous outer surface with the base, such that the cooking chamber is fully enclosed and heat is retained. When closed, the drawer is detected by a safety sensor that allows the heating source to operate; opening or improper positioning causes the controller to shut off heating. EX1012, ¶[0038]. The sealing and continuous-surface configuration ensures temperature consistency and energy efficiency by minimizing thermal leakage.

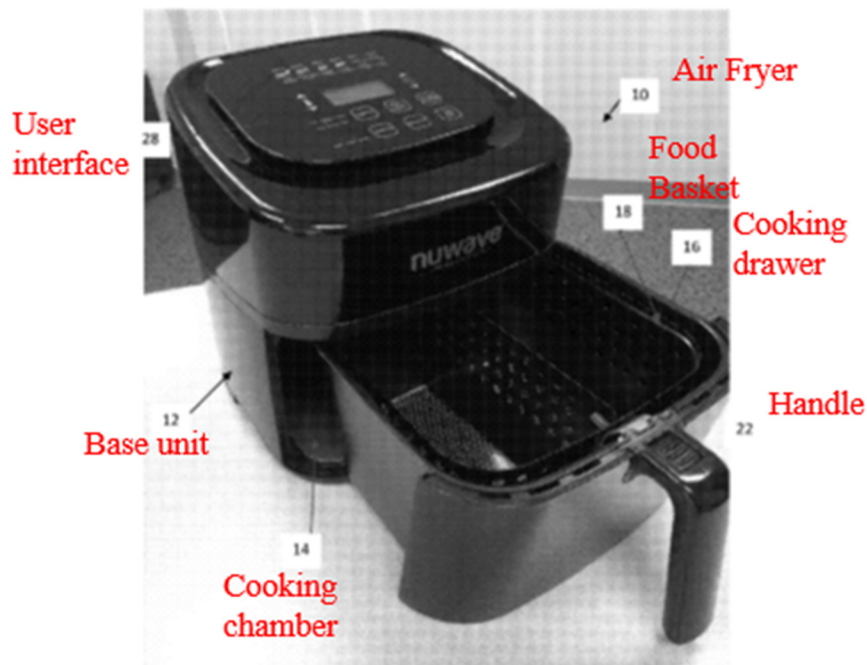


FIG. 2

49. As shown in Moon's Fig. 2 annotated and reproduced above, Moon further describes a removable handled food basket positioned within the cooking drawer, which may include a divider, and openings on all surfaces for directing heated airflow. EX1012, ¶[0038], ¶[0039]. The bottom surface of the drawer includes a contour configured to direct air in a controlled flow pattern through the basket, contributing to even heating. *Id.*, ¶[0039]; ¶[0040].

**D. Conrad (EX1014)**

50. International Publication WO2019/068193A1 (hereinafter "Conrad"), published on April 11, 2019, and is prior art under at least 35 U.S.C. § 102(a)(1). EX1014.

51. Conrad is directed to a table-top kitchen device comprising a first and second food preparation chamber. These chambers are physically separated from each other in such a way that each chamber includes an autonomous cooking environment.

52. Conrad discloses an air-fryer with dual cooking zones where "each 'cooking zone' is a distinct volumetric region within cooking chamber 104 that can be selectively subjected to different cooking conditions from the other cooking zone(s)." EX1014, ¶145. For example, Conrad teaches that within "each cooking zone 180, these cooking devices may be selectively activated and deactivated

according to a cooking program (e.g. set temperature, humidity, convection speed) independently of the cooking devices in the other cooking zone 180.” EX1014, ¶149.

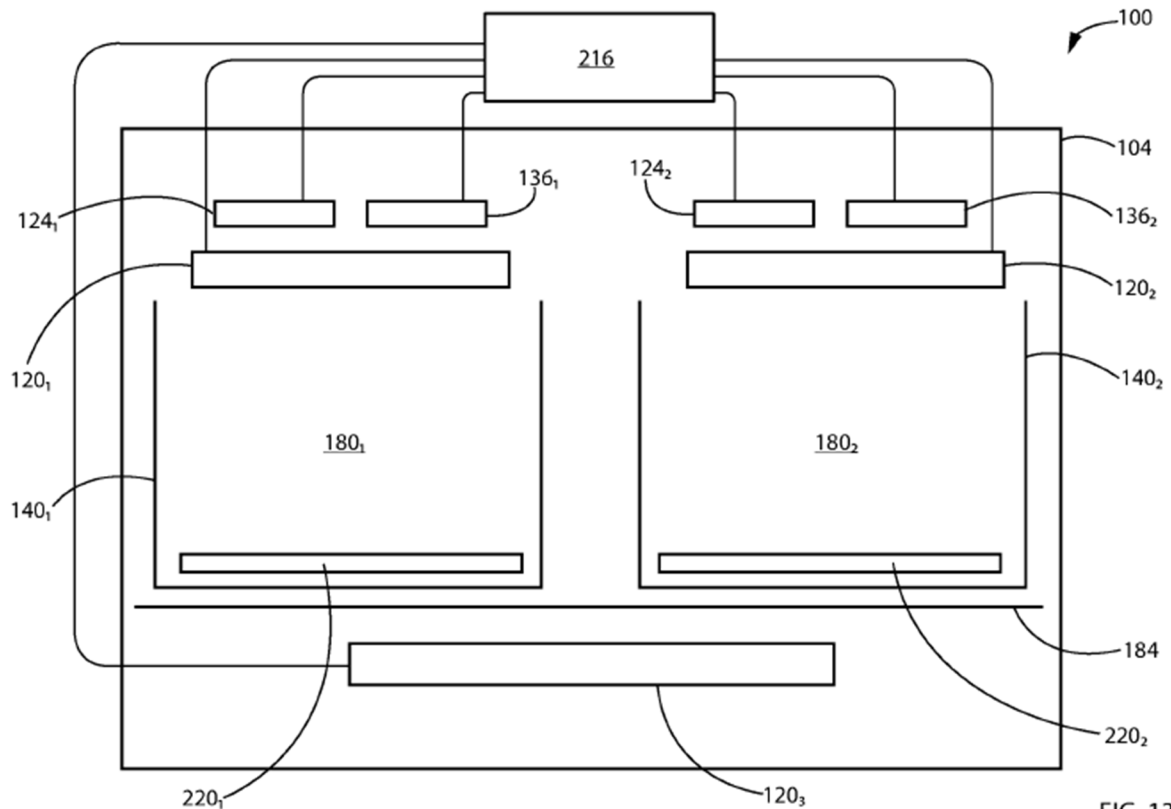


FIG. 13

53. Conrad’s Fig. 13 is reproduced above and includes: “controller 216 which is communicatively coupled to the cooking devices (e.g. heating elements 120, air movers, 124, and steam generators 136) associated with the plurality of cooking zones (e.g. first and second zones 180<sub>1</sub> and 180<sub>2</sub>) defined within cooking chamber 104.” The cooking program may be selected by a user. EX1014, ¶162. Conrad’s controller 216 produces “different cooking conditions (temperature, convective air speed, and/or humidity) in the two cooking zones 180.” EX1014,

¶164. In particular, Conrad teaches receiving inputs through the controller 216 to execute a cooking program, which may be “stored in memory within controller 216, and selected by the user.” EX1014, ¶223.

## VII. CLAIM CONSTRUCTION

54. In my opinion, for purposes of this Petition, none of the terms in the Challenged Claims require additional construction beyond their plain and ordinary meaning as a POSITA would understand them at the time of the invention and in view of the specification of the '026 Patent.

## VIII. GROUND 1: ZHANG ANTICIPATES CLAIMS 1-4, 7, AND 16

### A. Claim 1<sup>3</sup>

#### *Claim 1[pre]*

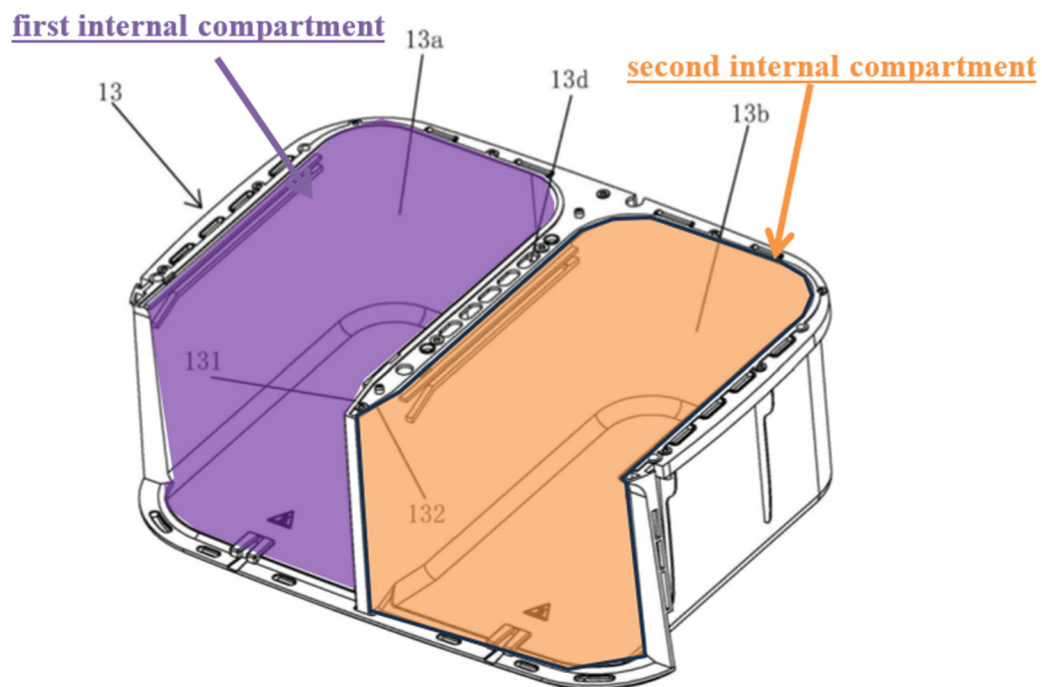
55. It is my opinion that Zhang discloses “*a cooking system*”. Zhang discloses an “capable of simultaneously performing two cooking operations.” EX1010 ¶[0005]. Air-fryers are a type of cooking system that would be within claim 1.

#### *Claim 1[a]*

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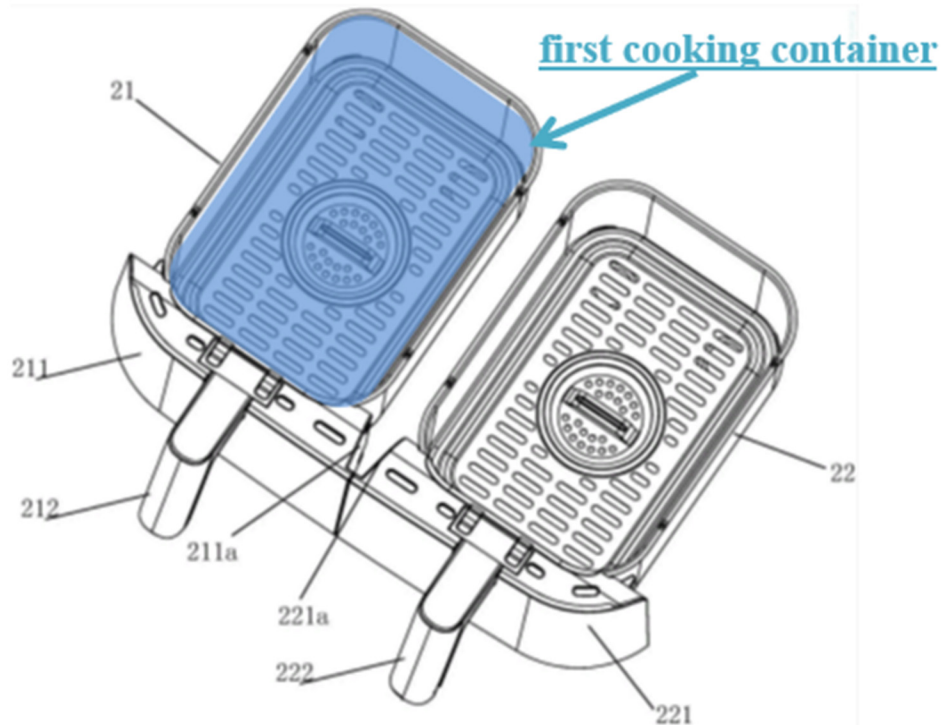
<sup>3</sup> Reference to the claim language in the subsections below is the same as in the chart of challenged claims above. The language of the claim limitation is also repeated in the body of the section that follows the subheading.

56. It is my opinion that Zhang discloses “a housing having a first internal compartment and a second internal compartment.” Zhang explains that cooking cavity of the main body 1 is provided with a first cavity 13a and a second chamber 13b. EX1010, ¶[0034]. Zhang’s main body 1 corresponds to the claimed “housing”. Each of Zhang’s elements 13a/13b correspond to the claimed “first internal compartment” and “second internal compartment”, respectively. It should be appreciated that this correspondence is interchangeable (i.e., 13a can correspond to either the *first internal compartment* or the *second internal compartment*, and 13b corresponds to the other of the *first internal compartment* or the *second internal compartment*). Thus, Zhang teaches this feature.



***Claim 1[b]***

57. It is my opinion that Zhang discloses “a first cooking container defining a first cooking volume.” Zhang provides a first pot body 21. EX1010 ¶[0033]. First pot body 21 defines a cooking volume as it is a basket and has a bottom and sides as shown in Zhang’s Figure 5 below.



***Claim 1[c]***

58. It is my opinion that Zhang discloses “said first cooking container being removably receivable within said first internal compartment to close off an opening to said first internal compartment when inserted therein.” Zhang discloses that the first cavity 13a is capable of receiving the first pot body 21, including being removably receivable. *See* EX1010 ¶[0034]. The first pot body 21 closes off an

opening to the first internal compartment when the first pot body 21 is inserted into the internal compartment 13a, as shown in FIG. 1 and also Fig. 2 annotated below.

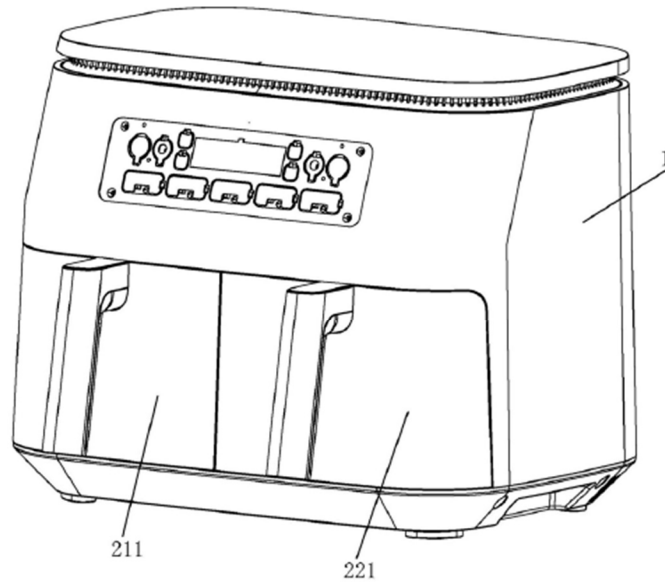


图1

Fig. 1

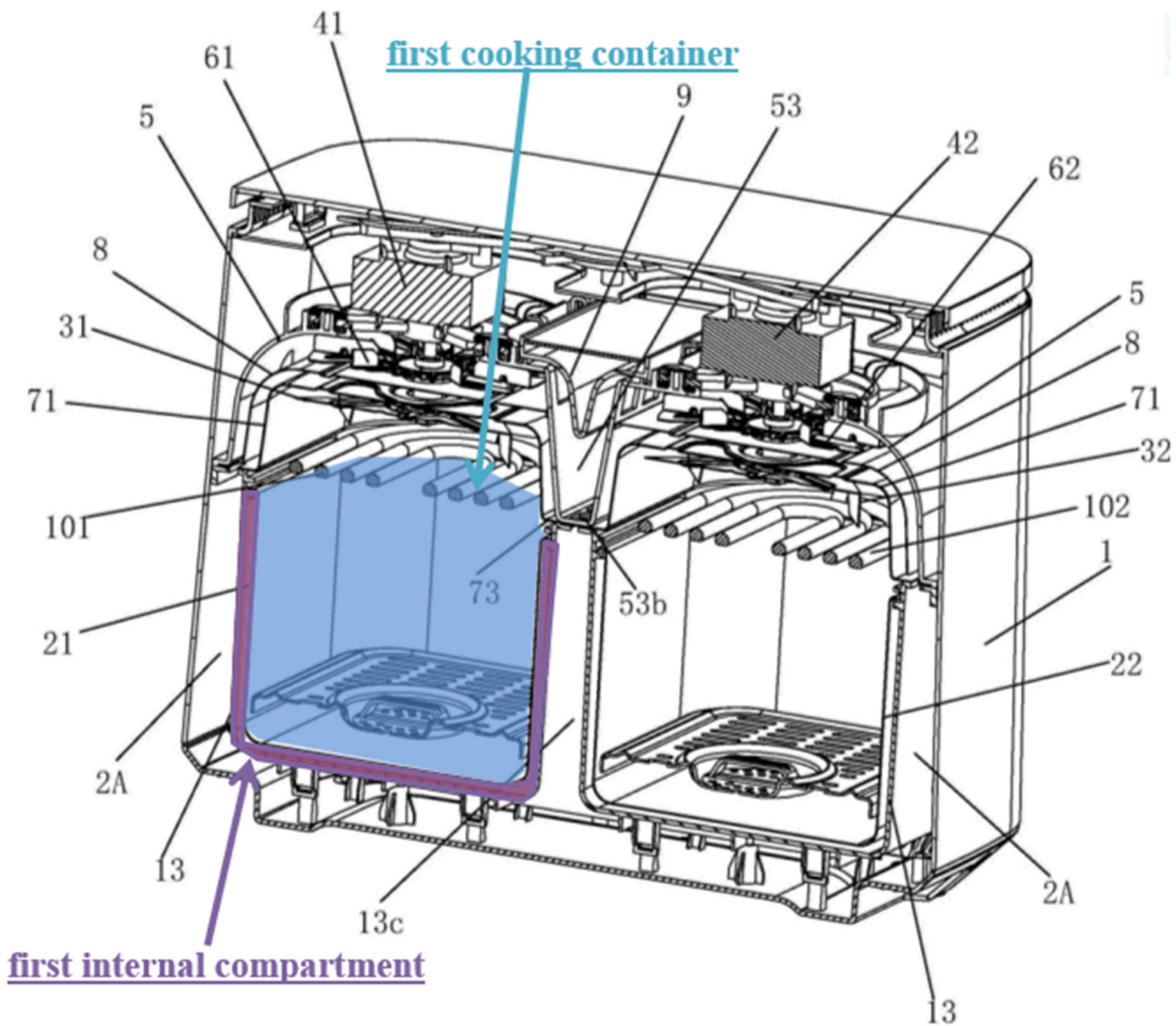
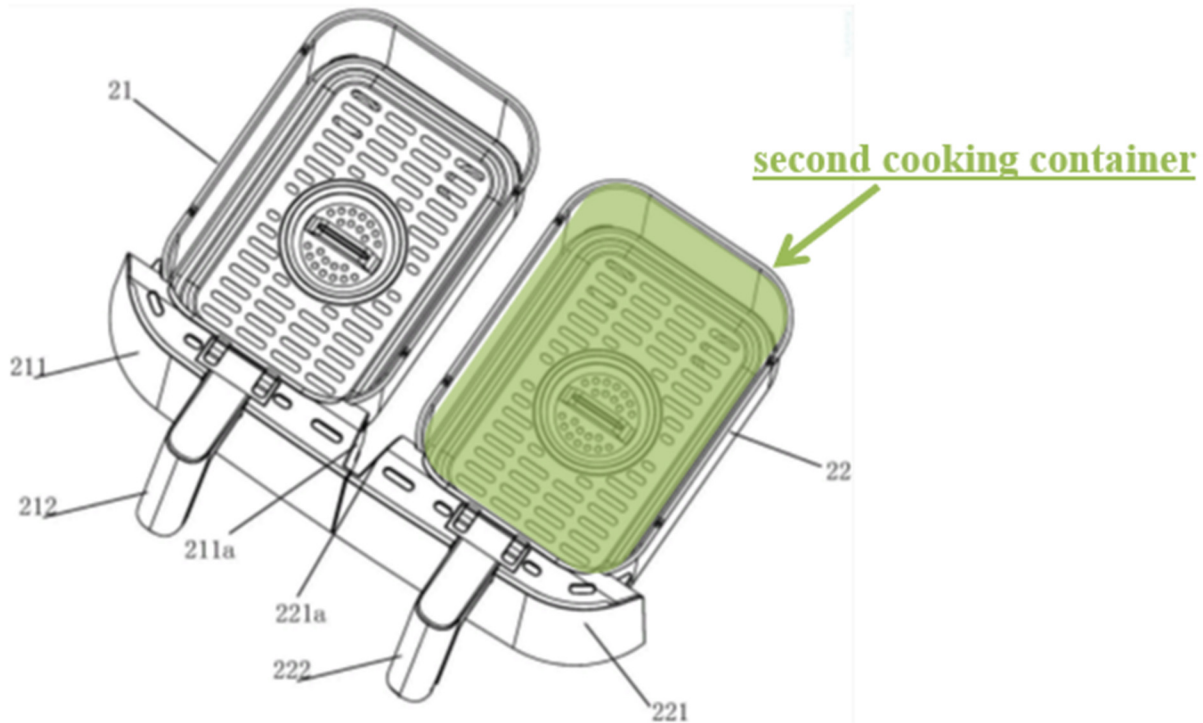


Fig. 2 (annotated)

***Claim 1[d]***

59. It is my opinion that Zhang discloses “a second cooking container defining a second cooking volume.” Zhang provides a second pot body 22. EX1010 ¶[0033]. Second pot body 22 defines a cooking volume as it is a basket and has a bottom and sides as shown in annotated Figure 5 below.



***Claim 1[e]***

60. It is my opinion that Zhang discloses “second cooking container defining a second cooking volume, said second cooking container being removably receivable within said second internal compartment to close off an opening to said second internal compartment when inserted therein.” Zhang discloses that the second cavity 13b is capable of accommodating the second pot body 22. *See* EX1010 ¶[0034], including being removably receivable. The second pot body 22 closes off an opening to the first internal compartment 13b when the second pot body 22 is inserted into the internal compartment 13b, as shown in FIG. 1 and also Fig. 2 annotated below.

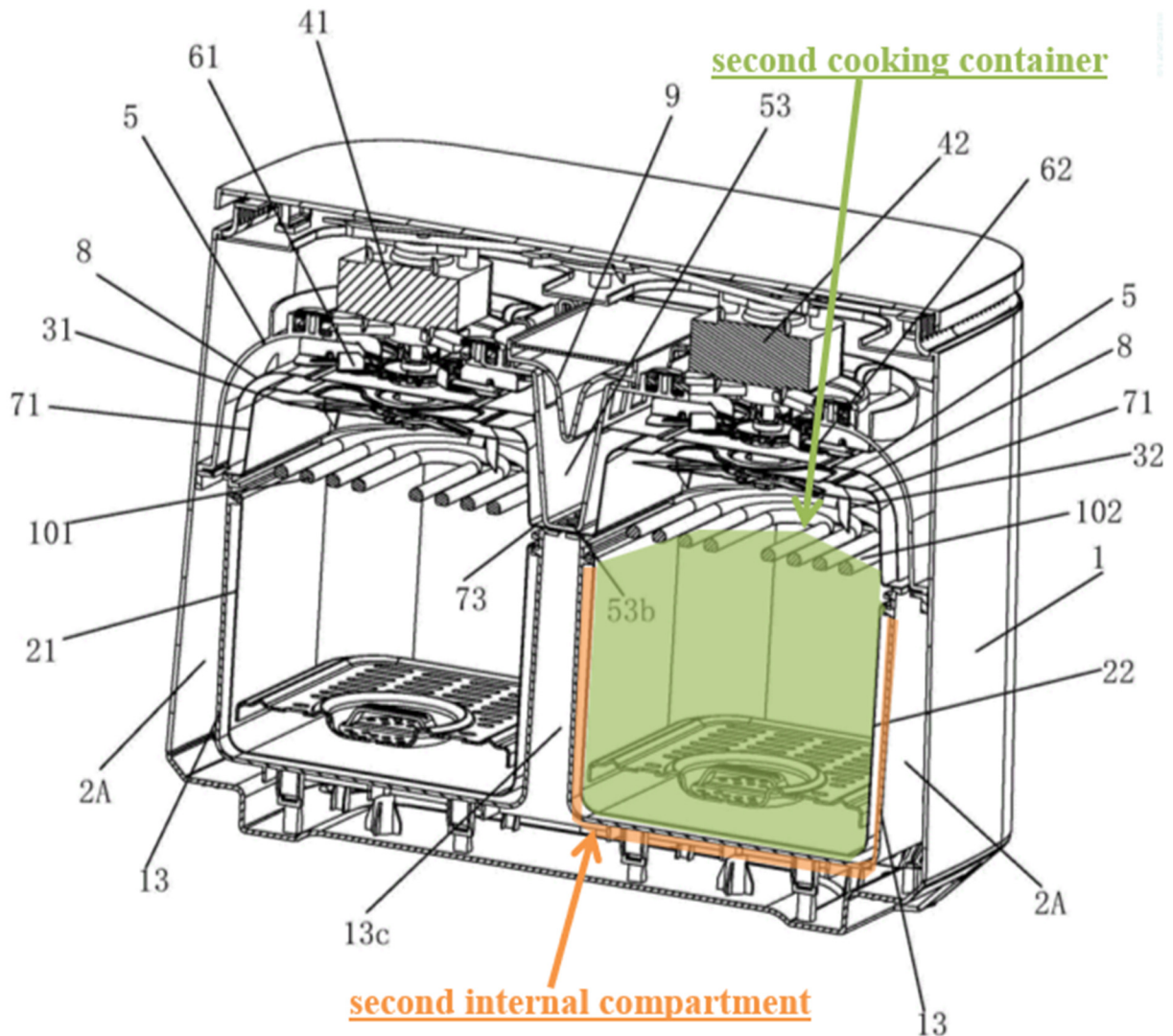
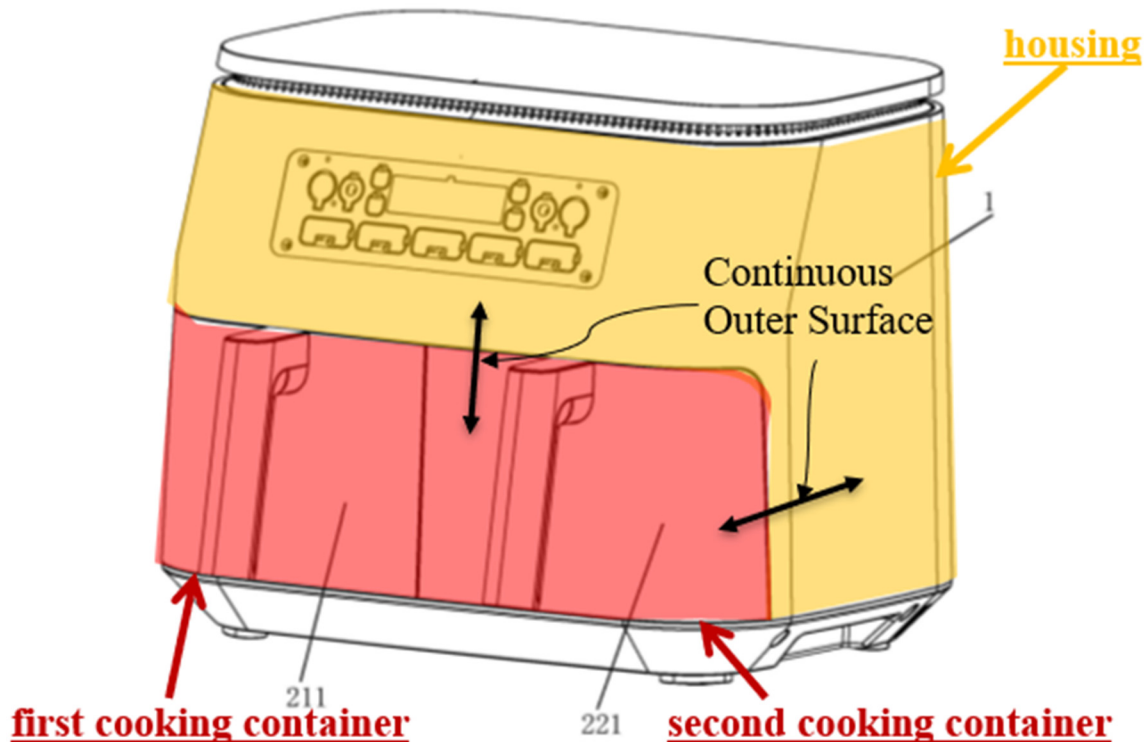


Fig. 2 (annotated)

***Claim 1[f]***

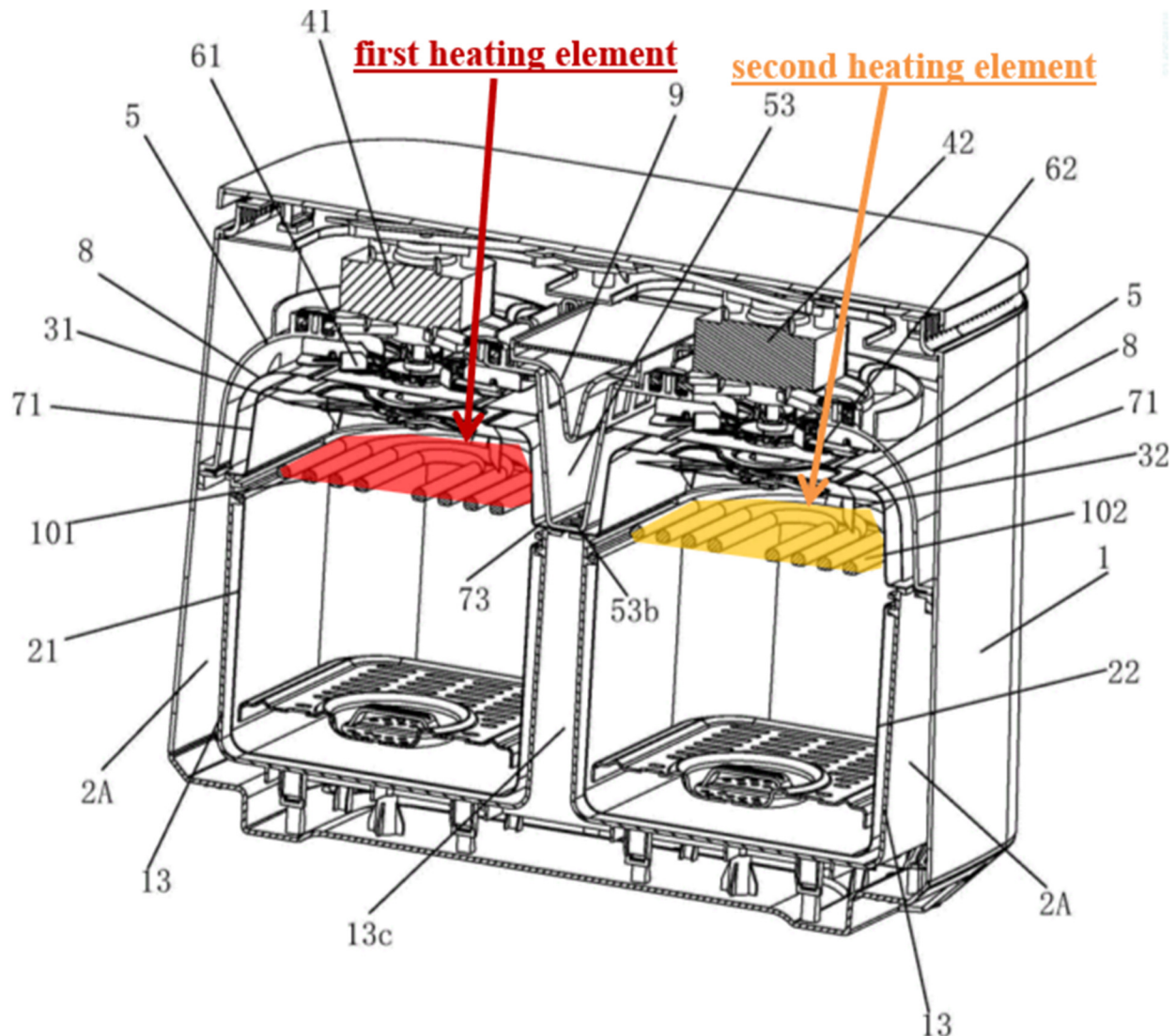
61. It is my opinion that Zhang discloses “the first and second cooking containers each forming a continuous outer surface with the housing when the first and second cooking containers are inserted into the first and second internal compartments respectively.” Zhang discloses that when the pot bodies are inserted the outer side 211 of the first pot body and outer side 221 of the second pot body

remain flush. EX1010 ¶[0036]. This provides a flat appearance with the housing body 1 as shown in FIG. 1. EX1010 ¶[0036]. This arrangement provides a continuous outer surface that meets the claim limitation.



***Claim 1[g]***

62. It is my opinion that Zhang discloses “a first heating element and a second heating element disposed in said housing.” Zhang discloses an electric heating tube 101, 102 above each internal compartment. EX1010, ¶[0037]-[0046]. Zhang’s electric heating tube 101 corresponds to the *first heating element* and Zhang’s electric tube 102 corresponds to the *second heating element*. See annotated Fig. 2 below; EX1010.



***Claim 1[h]***

63. It is my opinion that Zhang discloses “said first heating element being in thermal communication with said first cooking volume.” Zhang discloses that the heat generated by the heating tube 101 would be blown towards the pot body 21:

During operation of the air fryer of this embodiment, the two hot air fans and the two cold air fans start to rotate at high speed driven by two motors. On one hand, the two hot air fans respectively blow the heat generated by the two electric heating

tubes into the interiors of the two pot bodies to heat the food inside the two pot bodies.

EX1010 ¶[0048]. A POSITA would recognize that the first heater element (Zhang's heating tube 101) heats the cooking volume and thus the first heating element is in thermal communication with the first cooking volume. EX1009, 151.

***Claim 1[i]***

64. It is my opinion that Zhang discloses “said second heating element being in thermal communication with said second cooking volume.” Zhang discloses that the heat generated by the heating tube 102 would be blown towards the pot body 22.

During operation of the air fryer of this embodiment, the two hot air fans and the two cold air fans start to rotate at high speed driven by two motors. On one hand, the two hot air fans respectively blow the heat generated by the two electric heating tubes into the interiors of the two pot bodies to heat the food inside the two pot bodies.

EX1010 ¶[0048]. The second heating element (Zhang's heating tube 102) heats the cooking volume and thus the second heating element is in thermal communication with the second cooking volume. A POSITA would understand that the heating tube 102 would be in thermal communication to cook the food inside the pot body. EX1009, 151.

***Claim 1[j]***

65. It is my opinion that Zhang discloses “the first and second heating elements being independently operable to independently cook food contained within

the first and second cooking containers.” Zhang states that dual arrangement of the air-fryers allows two cooking operations at the same time, while differentiating Zhang’s system from air fryers that can’t cook “two different types of food or perform two different types of cooking procedures”. EX1010, ¶¶[0004]-¶[0005].

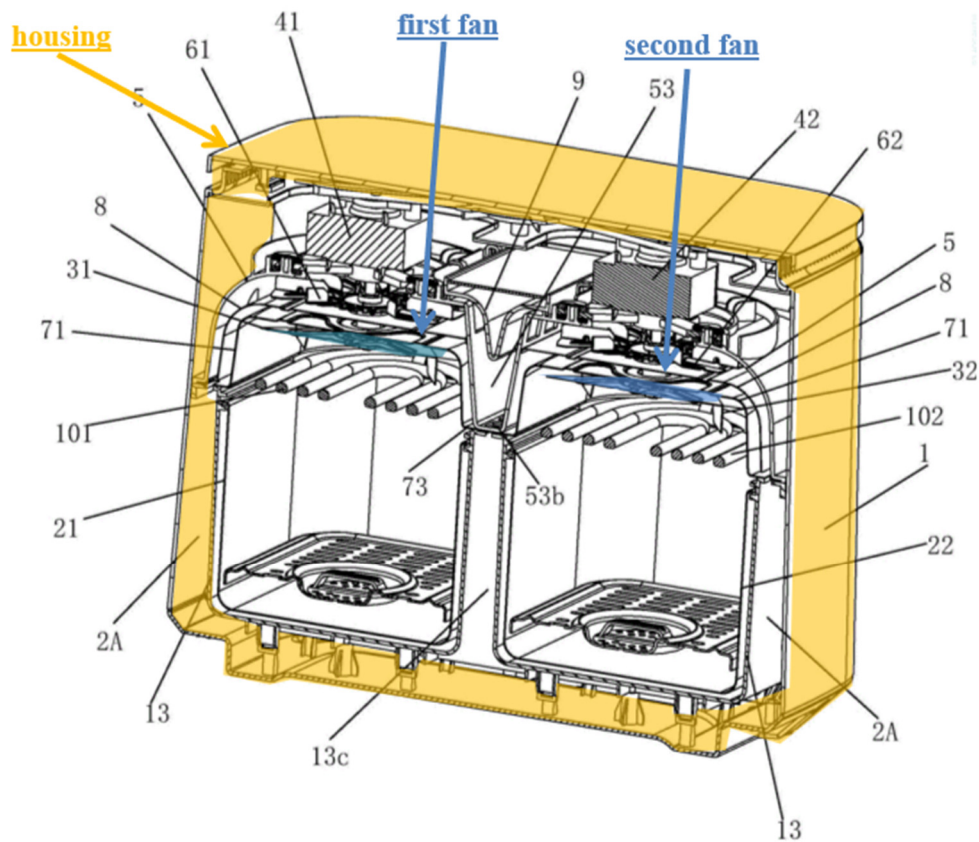
Zhang further states:

Compared with the prior art, the advantages of the invention include: by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. As described above, it is my opinion that a POSITA understands that “two cooking operations” simultaneously allows for independent operation of the heating elements.

***Claim 1[k]***

66. It is my opinion that Zhang discloses “a first fan and a second fan disposed in said housing.” Zhang describes air fans 31 and 32, which each correspond to the claimed “first fan” and “second fan”, respectively, positioned above the heating tubes for each of the internal cavities. EX1010, ¶¶[0038]-[0039]; Fig. 2 (annotated below). Thus, Zhang discloses this limitation.



***Claim 1[l]***

67. It is my opinion that Zhang discloses “said first fan being in fluid communication with said first cooking volume.” Zhang provides that hot air is blown by the air fan 31 into the pot body 21 and thus Zhang’s air fan 31 is in fluid communication with the cooking volume of pot body 21. See EX1010, ¶[0048]; Fig. 2.

***Claim 1[m]***

68. It is my opinion that Zhang discloses “said second fan being in fluid communication with said second cooking volume.” Zhang discloses that hot air is blown by the air fan 32 into the pot body 22. *See* EX1010, ¶[0048]. A POSITA would understand that this air fan 32 is in fluid communication with the pot body 22.

69. Accordingly, for at least the above reasons, it is my opinion that Zhang teaches each and every claim element of claim 1 and thus invalidates claim 1 under 35 U.S.C. § 102(a)(1).

**B. Claim 2**

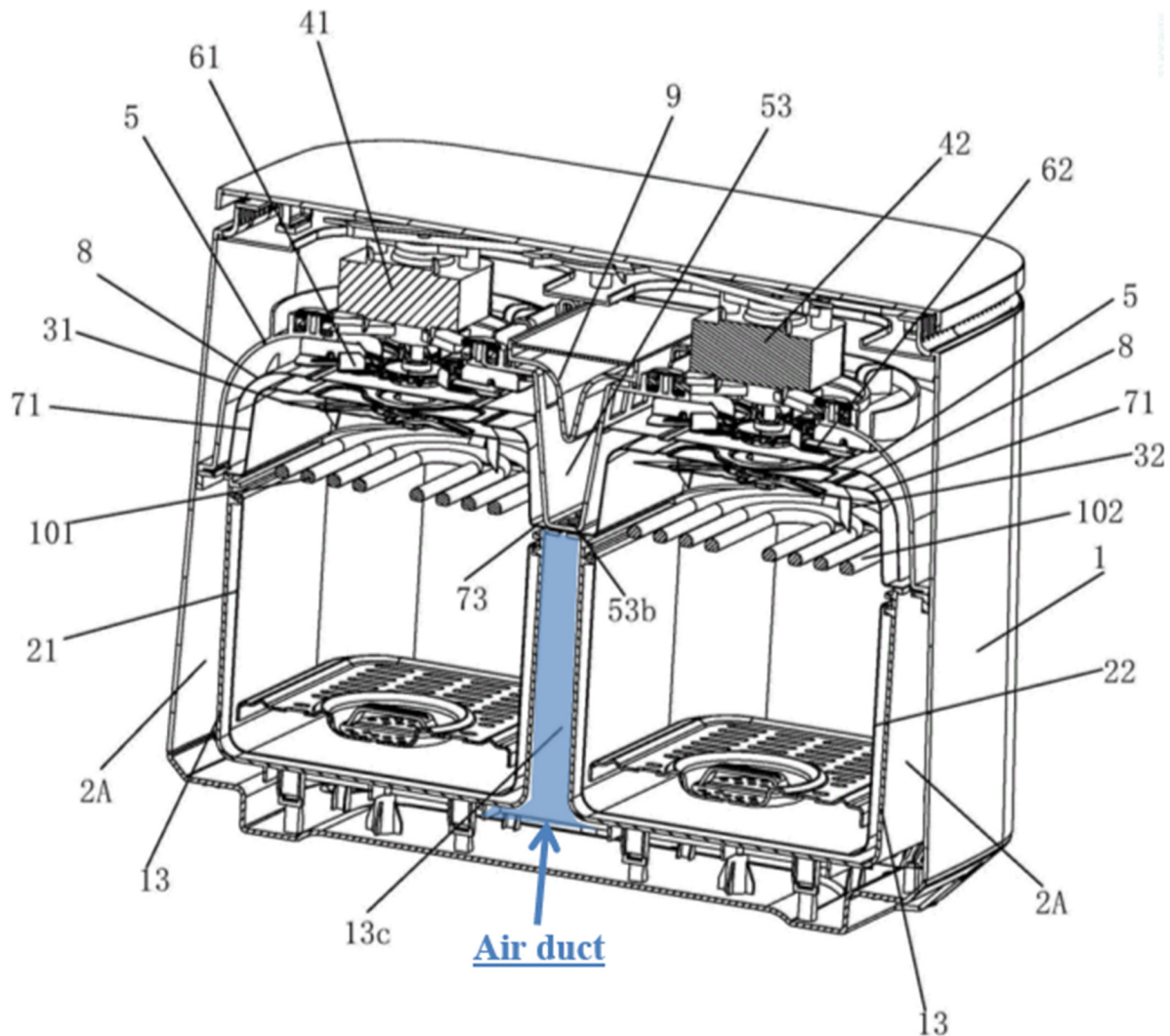
70. Claim 2 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 2.

71. It is my opinion that Zhang discloses claim 2, which recites “wherein said first cooking container and said second cooking container are individually insertable into said first cooking compartment and said second cooking compartment respectively.” Zhang teaches that the first pot body and the second pot body are arranged independently. *See* EX1010, ¶[0021]. There are two separate handles on each pot body. *See* EX1010, ¶ [0036]. Each pot body is connected to its own respective bracket (221, 222) to enable individual insertion. *Id.* Thus, it is my opinion that Zhang discloses claim 2.

**C. Claim 3**

72. Claim 3 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 3.

73. It is my opinion that Zhang discloses claim 3, which recites “wherein said first internal compartment and said second internal compartment are fluidly separate.” Zhang shows that the cavities 13a and 13b are separated by an air duct 13c. EX1010, ¶[0035]. A POSITA would recognize that this air duct 13c keeps the cavities fluidly separate from each other.



#### D. Claim 4

79. Claim 3 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 3.

#### *Claim 4[a]*

74. It is my opinion that Zhang discloses “wherein said first fan is stacked vertically relative to said first heating element within said housing.” Zhang states

that the air fan 31 is positioned above the heating tube 101. EX1010, ¶[0038]. Based on the FIG. 2, a POSITA would see that the vertical stacking is taught by Zhang.

***Claim 4[b]***

75. It is my opinion that Zhang discloses “said second fan is stacked vertically relative to said second heating element within said housing.” Zhang states that the air fan 32 is positioned above the heating tube 102. EX1010, ¶39. Based on the FIG. 2, a POSITA would see that the vertical stacking is taught by Zhang.

**E. Claim 7**

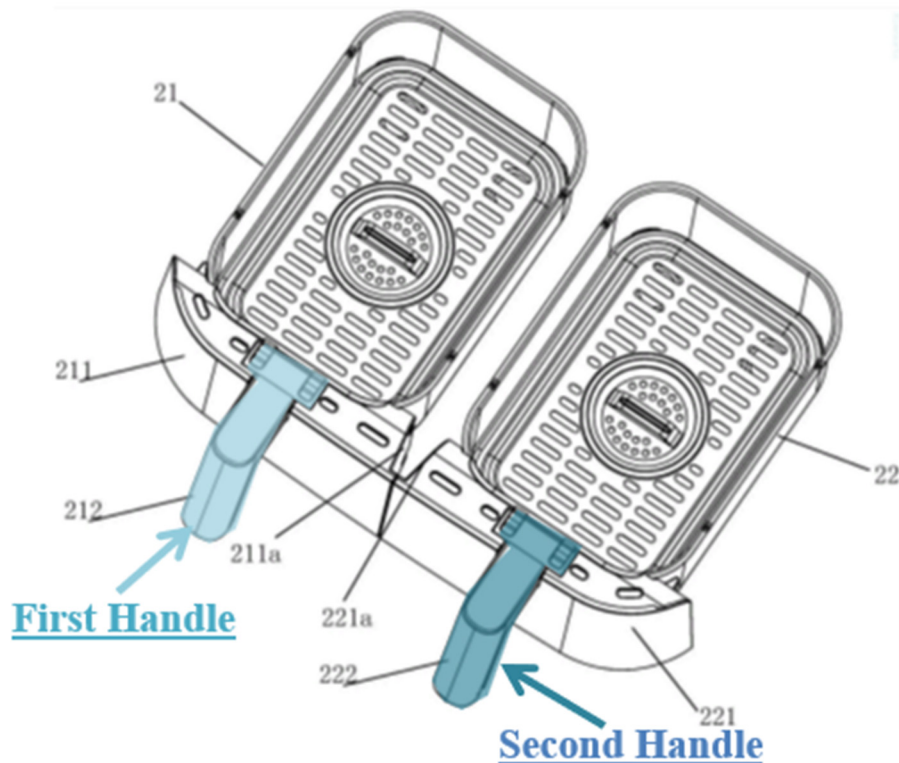
76. Claim 7 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 7.

***Claim 7[a]***

77. It is my opinion that Zhang discloses “wherein said first cooking container includes a first handle.” As shown in FIG. 1, a handle 212 is connected to the pot body 21. EX 1010, ¶36. Thus, Zhang discloses this limitation.

***Claim 7[b]***

78. It is my opinion that Zhang discloses “said second cooking container includes a second handle.” As shown in FIG. 1, a handle 222 is connected to the pot body 22. EX 1010, ¶36. Thus, Zhang discloses this limitation.



## F. Claim 16

### *Claim 16[pre]*

79. My discussion above addressing claim 1[pre] applies to claim 16[pre] and is repeated and incorporated by reference here.

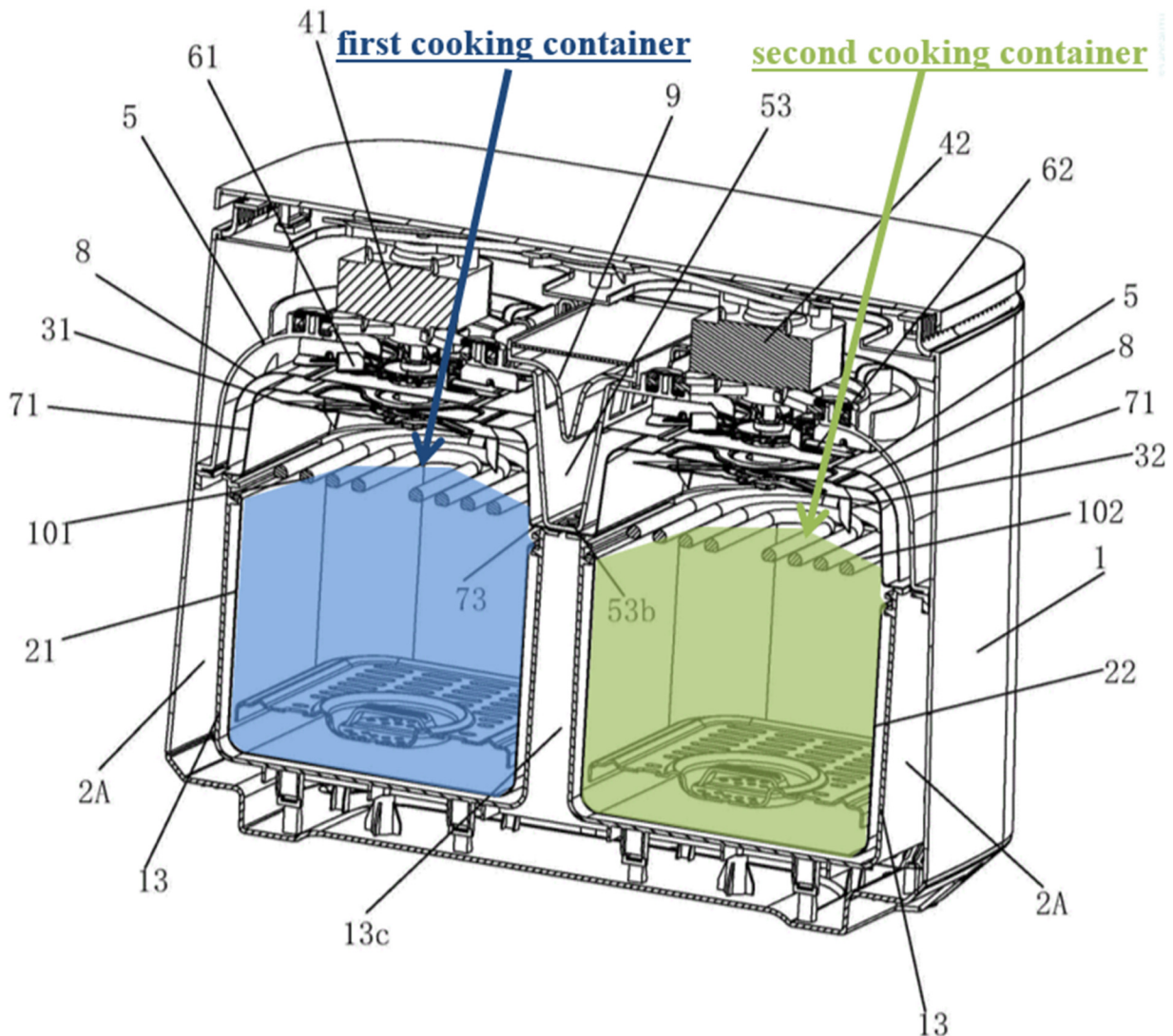
### *Claim 16[a]*

80. My discussion above addressing claim 1[a] applies to claim 16[a] and is repeated and incorporated by reference here.

### *Claim 16[b]*

81. It is my opinion that Zhang discloses “having first and second internal independently removable cooking containers disposed therein.” Zhang explains that

the cooking cavity of the main body 1 is provided with a first cavity 13a and a second cavity 13b. EX1010, ¶[0034]. Zhang provides a first pot body 21 and second pot body 22. EX1010, ¶[0033]. Zhang discloses that the first cavity 13a is capable of receiving the first pot body 21 and the second cavity 13b is capable of receiving the second pot body 22. EX1010, ¶[0034]. Thus, Zhang teaches this feature.

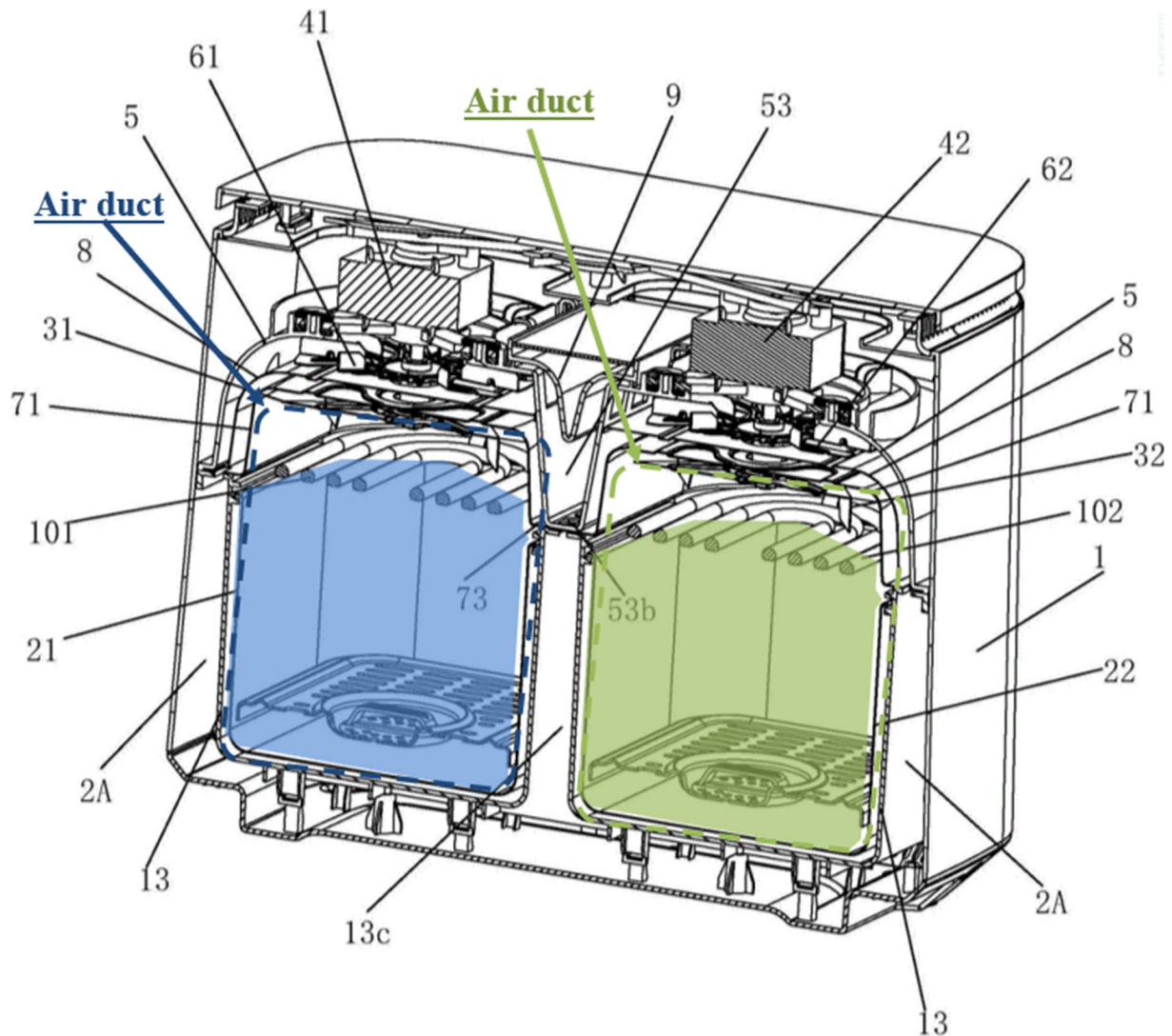


***Claim 16[c]***

82. It is my opinion that Zhang discloses “each of the first and second cooking containers defining a cooking volume therein.” Zhang provides a first pot body 21 and a second pot body 22. EX1010, ¶[0033]. It is my opinion that a POSITA would understand that based on the figures that the first pot body 21 and second pot body 22 each defines a cooking volume, as each pot body is a basket and has a bottom and sides.

***Claim 16[d]***

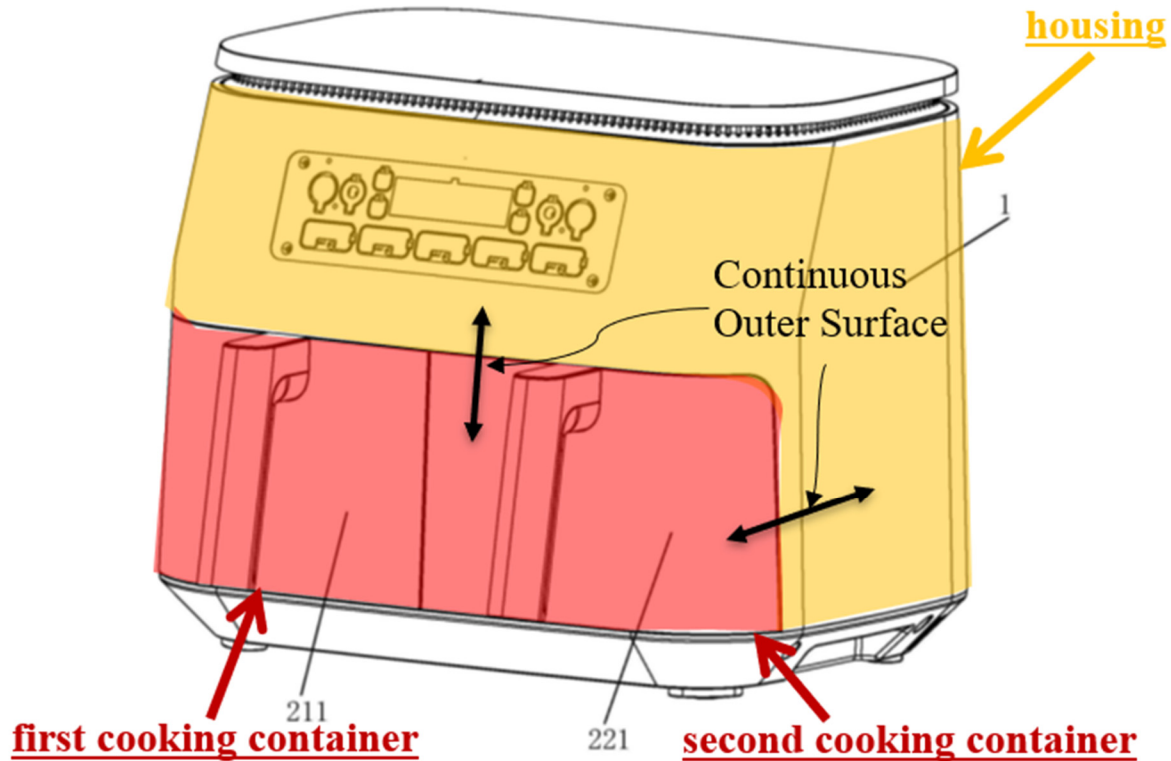
83. It is my opinion that Zhang discloses “the first and second cooking containers being configured to engage with first and second respective channels inside the housing to define first and second respective air ducts therein.” Each of the pot bodies 21 and 22 when inserted into the house define an air duct as shown in the below figure, and if there were no air duct to allow airflow to the food within the pot bodies, then the food would not be able to cook as intended. Moreover, Zhang explains that air flows into each respective pot body and a POSITA would recognize that an air duct is required within each cavity to circulate air.



***Claim 16[e]***

84. It is my opinion that Zhang discloses “the first and second cooking containers forming a continuous outer surface with the housing when the first and second cooking containers are disposed in the housing.” Zhang provides that when the pot bodies are inserted the outer side 211 of the first pot body and outer side 221 of the second pot body can “remain flush”. EX1010, ¶[0036]. This provides a flat appearance with the housing body 1 as shown in FIG. 1 below. EX1010, ¶[0036]. It

is my opinion that a POSITA would understand this arrangement provides a continuous outer surface that meets the claim limitation.



***Claim 16[f]***

85. It is my opinion that Zhang discloses “first and second heating elements disposed in the housing adjacent the cooking volume of the first and second cooking containers, respectively.” This is shown in FIGS. 1-6 of Zhang. As shown below, the heating element is directly above the cavities which hold Zhang’s pot bodies (cooking containers). The heating elements of Zhang placed directly above the cooking cavities which hold the first and second containers meets a POSITA’s

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## 47

86. It is my opinion that Zhang discloses “the first and second heating elements being independently operable.” Zhang states that dual arrangement of the air-fryers allows two cooking operations at the same time, while differentiating

Zhang's system from air fryers that can't cook "cook "two different types of food or perform two different types of cooking procedures". EX1010, ¶[0004]-¶[0005].

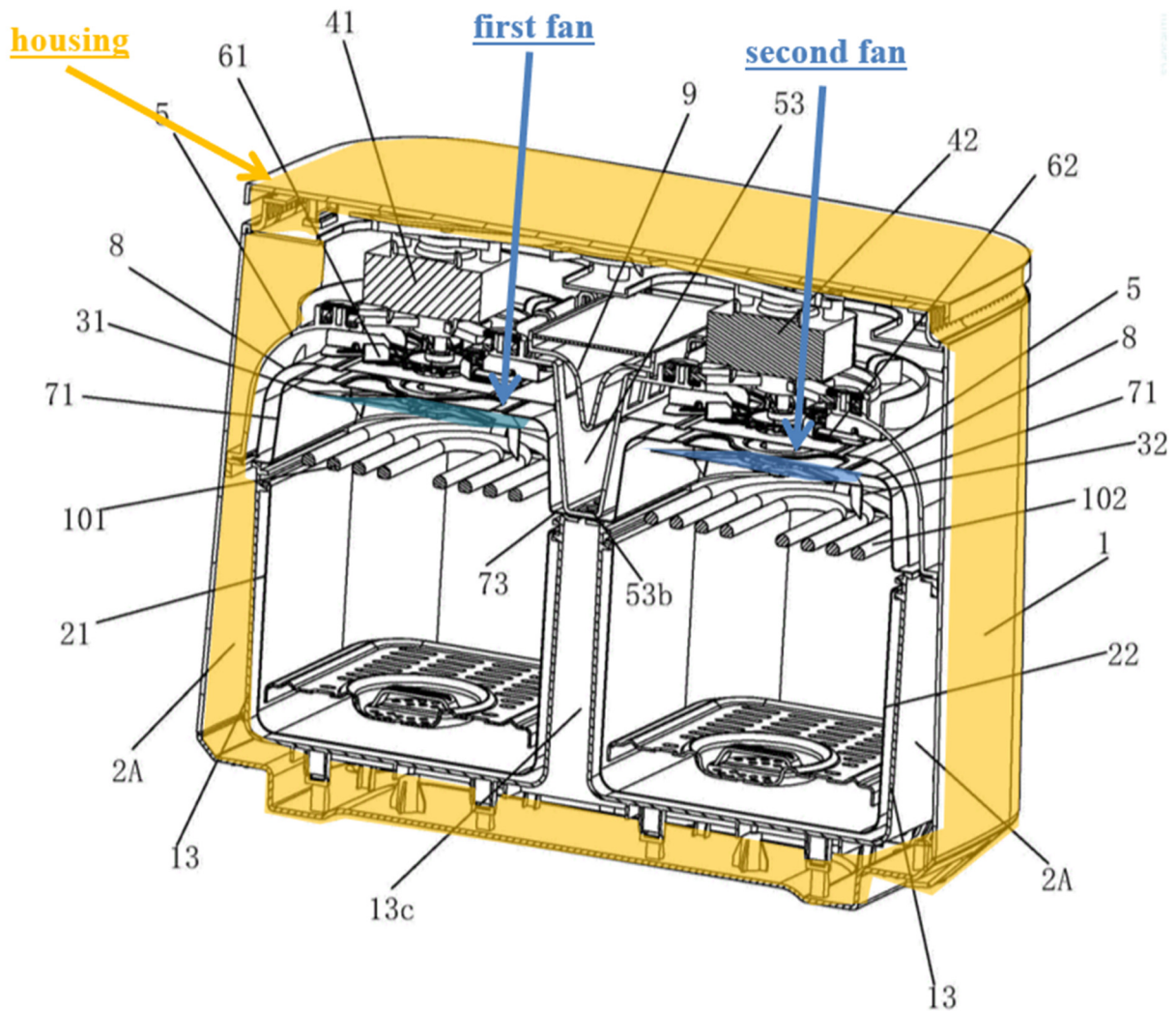
Zhang further states:

Compared with the prior art, the advantages of the invention include: by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. It is my opinion that a POSITA would understand that the heating elements can be independently operable in order to provide "two cooking operations".

***Claim 16[h]***

87. It is my opinion that Zhang discloses "first and second fans disposed in the housing adjacent the first and second heating elements, respectively." Zhang describes air fans 31 and 32 positioned above the heating tubes for each of the internal cavities. EX1010, ¶¶[0038]-[0039]. Thus, Zhang discloses this limitation as further shown in the annotated figure below.



***Claim 16[i]***

88. It is my opinion that Zhang discloses “the first and second fans being independently operable.” Zhang states that dual arrangement of the air fryers allows two cooking operations at the same time, while differentiating Zhang’s system from air fryers that can’t cook “two different types of food or perform two different types of cooking procedures”. EX1010, ¶[0004]-¶[0005].

Compared with the prior art, the advantages of the invention include: by arranging the first pot body and second pot body

independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. It is my opinion that a POSITA would understand that the air fans can be independently operable.

***Claim 16[j]***

89. It is my opinion that Zhang discloses “the first and second fans being configured to circulate air through the first and second cooking volumes, respectively.” Air fryers use circulation for cooking food. EX1010, ¶[0002](“An air fryer is a novel household appliance that uses high-speed, high-temperature air circulation technology to fry food.” ) A POSITA would understand that the air fans would move the air around in the cooking volumes particularly as “two cooking operations” are performed in the Zhang system. EX1010, ¶[0021].

90. Accordingly, for at least the above reasons, it is my opinion that Zhang teaches each and every claim element of claim 16 and thus invalidates claim 1 under 35 U.S.C. § 102(a)(1).

**IX. GROUND 2 ZHANG IN VIEW OF CONRAD RENDERS CLAIMS 11-15, AND 17-19 OBVIOUS**

**A. Claim 11**

91. Should Patent Owner allege that Zhang does not anticipate Claim 11, it is nonetheless obvious over Zhang in view of Conrad for at least the following

reasons. The combination of Zhang in view of Conrad does not impact the teachings of Zhang with respect to the limitations of the '026 Patent.

***Claim 11[pre]***

92. My discussion above addressing claim 1[pre] in Ground 1 applies to claim 11[pre] and is repeated and incorporated by reference here.

***Claim 11[a]***

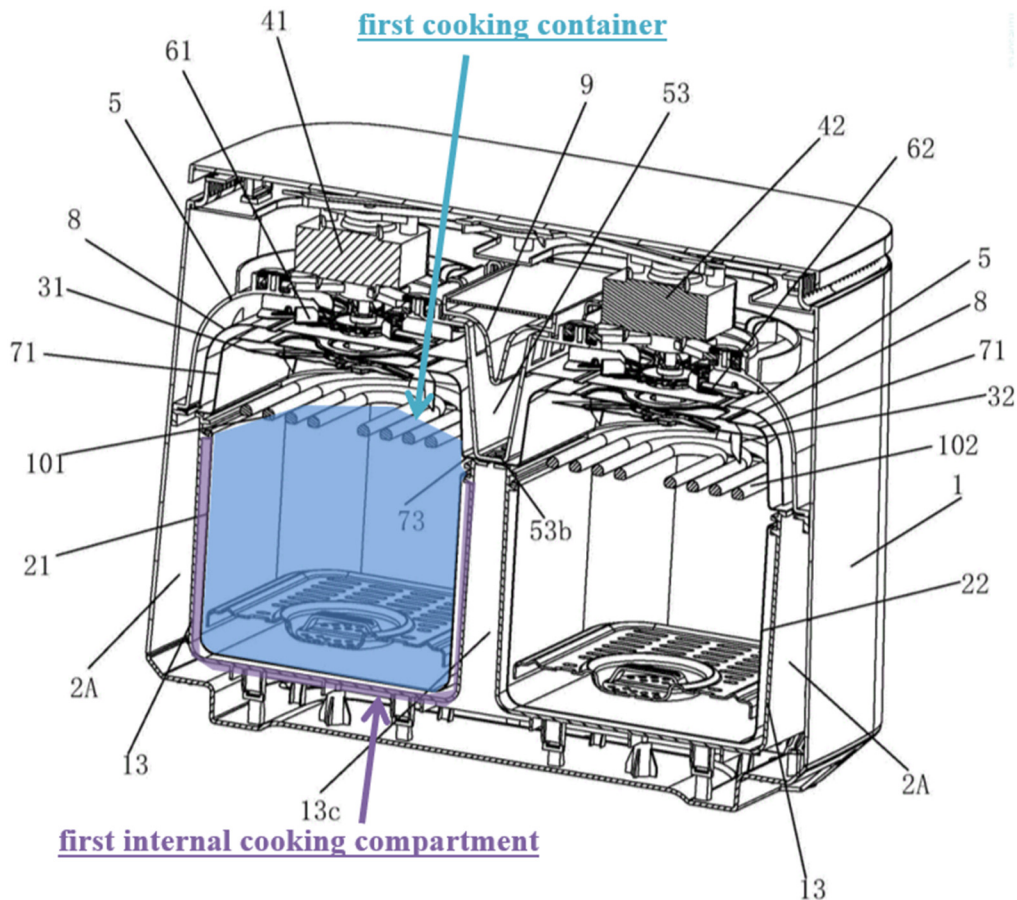
93. My discussion above addressing claim 1[a] in Ground 1 applies to claim 11[a] and is repeated and incorporated by reference here.

***Claim 11[b]***

94. My discussion above addressing claim 1[a] in Ground 1 applies to claim 11[b] and is repeated and incorporated by reference here.

***Claim 11[c]***

95. It is my opinion that Zhang discloses “a first cooking container removably disposed therein.” Zhang provides a first pot body 21. EX1010, ¶[0033]. Zhang discloses that the first cavity 13a is capable of receiving and accommodating the first pot body 21 and it is clear that the pot body 21 is removable. EX1010, ¶[0034].



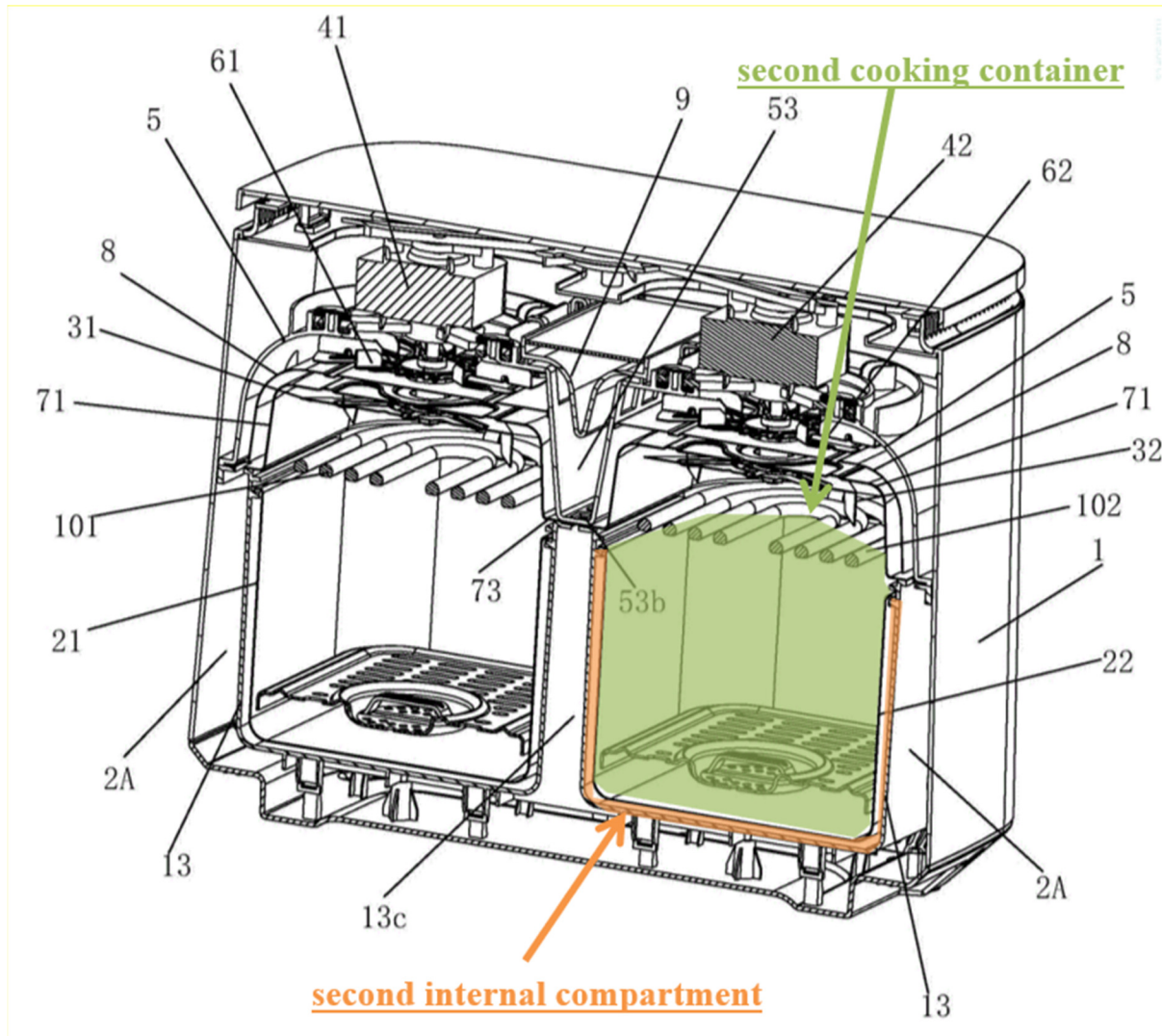
***Claim 11[d]***

96. My discussion above addressing claim 1[a] in Ground 1 applies to claim 11[d] and is repeated and incorporated by reference here.

***Claim 11[e]***

97. It is my opinion that Zhang discloses “a second cooking container removably disposed therein.” Zhang provides a second pot body 22. EX1010, ¶[0033]. Zhang discloses that the second cavity 13b is capable of accommodating

the second pot body 22 and it is clear that the pot body 21 is removable. EX1010, ¶[0034].



***Claim 11[f]***

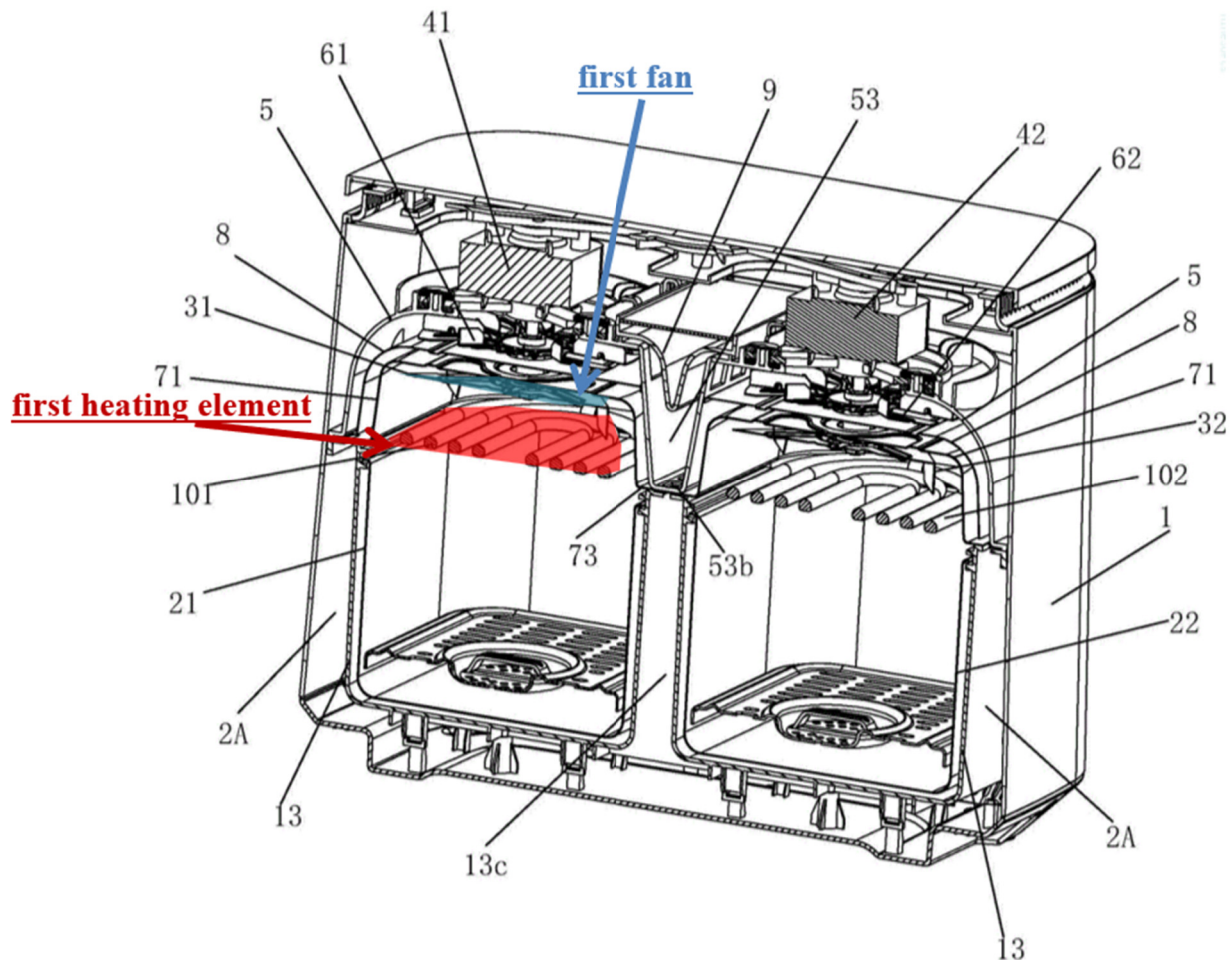
98. My discussion above addressing claim 1[f] in Ground 1 applies to claim 11[f] and is repeated and incorporated by reference here.

***Claim 11[g]***

99. It is my opinion that Zhang discloses “the first internal compartment including a first heating assembly comprising a first fan and a first heating element configured to cook food disposed in the first cooking container.” Zhang discloses an electrical heating tube 101 and air fan 31 for the first internal compartment. EX1010, ¶[0038]. Zhang discloses that the heat generated by the heating tube 101 would be blown towards the pot body 21:

During operation of the air fryer of this embodiment, the two hot air fans and the two cold air fans start to rotate at high speed driven by two motors. On one hand, the two hot air fans respectively blow the heat generated by the two electric heating tubes into the interiors of the two pot bodies to heat the food inside the two pot bodies.

EX1010, ¶[0048]. A POSITA would understand that the heating tube 101 would cook the food inside the pot body. Therefore, “heating tube 101” teaches the limitation “first heating element”, “air fan 31” teaches the limitation “first fan” and they collectively form the “first heating assembly” of claim 11 that is “configured to cook food disposed in the first cooking container”.



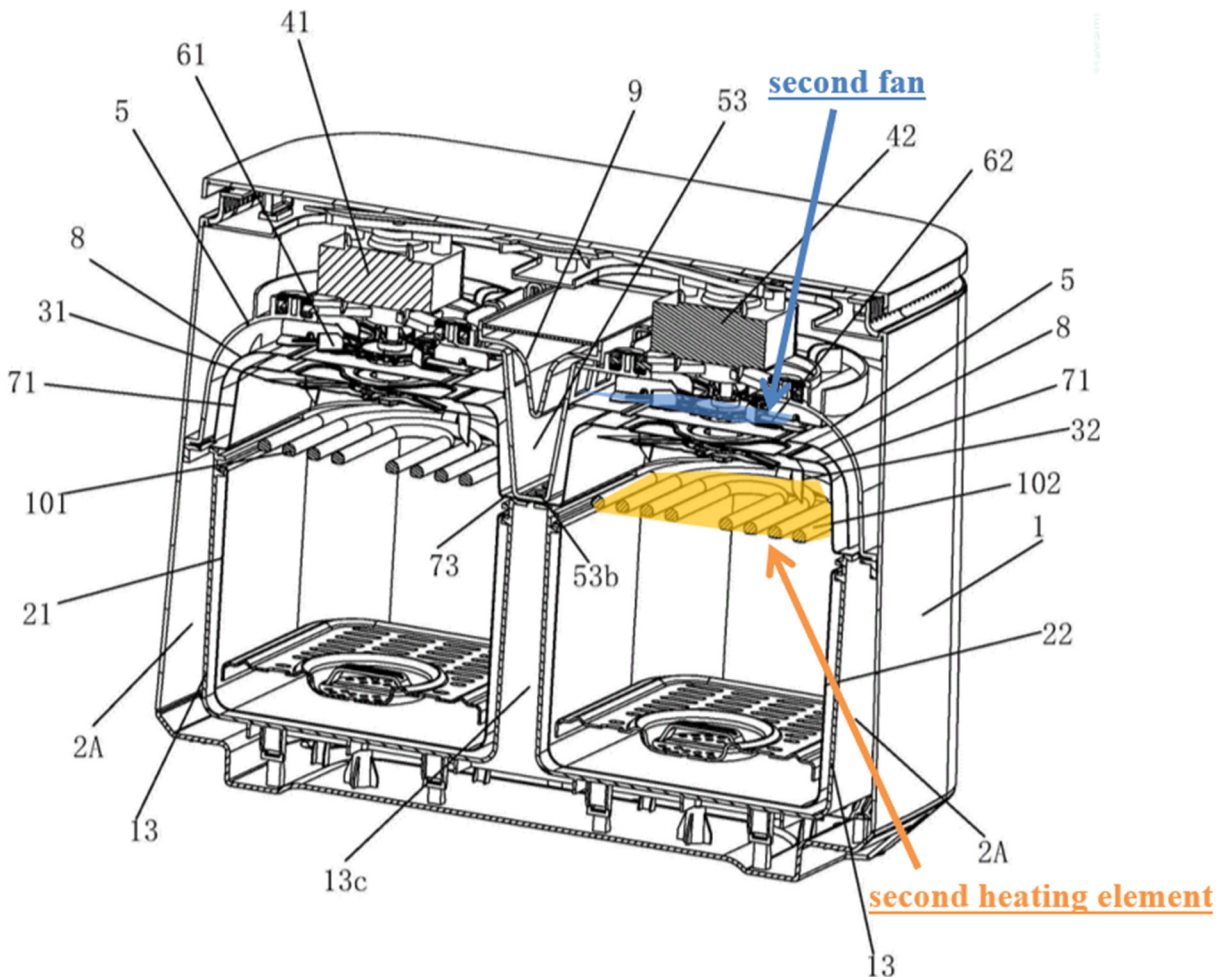
***Claim 11[h]***

100. It is my opinion that Zhang discloses “the second internal cooking compartment including a second heating assembly comprising a second fan and a second heating element configured to cook food disposed in the second cooking container.” Zhang discloses an electrical heating tube 102 and air fan 32 for the second internal compartment. EX1010, ¶[0038]. Zhang discloses that the heat generated by the heating tube 102 would be blown towards the pot body 22:

During operation of the air fryer of this embodiment, the two hot air fans and the two cold air fans start to rotate at high speed

driven by two motors. On one hand, the two hot air fans respectively blow the heat generated by the two electric heating tubes into the interiors of the two pot bodies to heat the food inside the two pot bodies.

EX1010, ¶[0048]. A POSITA would understand that the heating tube 102 would cook the food inside the pot body. Therefore, “heating tube 102” teaches the limitation “second heating element”, “air fan 32” teaches the limitation “second fan” and they collectively form the “second heating assembly” that is “configured to cook food disposed in the second cooking container”.



***Claim 11[i]***

101. It is my opinion that Zhang discloses “the first and second heating assemblies being independently operable to independently cook food contained within the first and second cooking containers.” Zhang states that dual arrangement of the air fryers allows two cooking operations at the same time, while differentiating Zhang’s system from air fryers that can’t cook “two different types of food or perform two different types of cooking procedures”. EX1010, ¶[0004]-¶[0005].

Zhang further states:

Compared with the prior art, the advantages of the invention include: by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. A POSITA would recognize that carrying out two cooking operations simultaneously allows for independent operation of the heating assemblies.

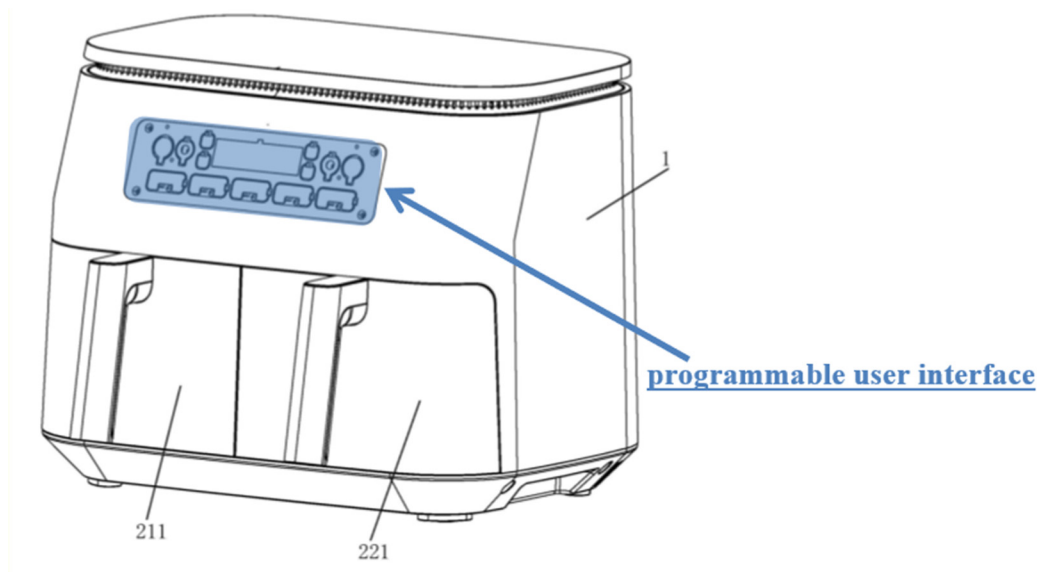
***Claim 11[j]***

102. It is my opinion that Zhang discloses “the first and second heating assemblies being programmable to simultaneously cook food in separate cooking modes.” Zhang states that dual arrangement of the air fryers allows two cooking operations at the same time, while differentiating Zhang’s system from air fryers that

can't cook "two different types of food or perform two different types of cooking procedures". EX1010, ¶[0004]-¶[0005]. Zhang further states:

Compared with the prior art, the advantages of the invention include: by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. Although not labelled, a POSITA viewing FIG. 1 would understand that there is a user interface and thus the cooking operations are programmable. A POSITA would recognize that cooking using a programmable user interface would simultaneously cook food in an independent operation of the heating elements.



103. To the extent that Patent Owner would dispute whether Zhang explicitly discloses "the first and second heating assemblies being programmable to simultaneously cook food in separate cooking modes," Conrad nonetheless discloses

this feature. Like Zhang, Conrad discloses an air-fryer with dual cooking zones where “each ‘cooking zone’ is a distinct volumetric region within cooking chamber 104 that can be selectively subjected to different cooking conditions from the other cooking zone(s).” EX1014, ¶145. For example, Conrad teaches that within “each cooking zone 180, these cooking devices may be selectively activated and deactivated according to a cooking program (e.g. set temperature, humidity, convection speed) independently of the cooking devices in the other cooking zone 180.” EX1014, ¶149. The cooking program may be selected by a user. EX1014, ¶162. Accordingly, Conrad discloses “the first and second heating assemblies being programmable to simultaneously cook food in separate cooking modes.”

104. It is my opinion that a POSITA would have been motivated to use the cooking programs disclosed in Conrad with the air-fryer in Zhang. Indeed, a POSITA would recognize the benefits to have each heating assembly programmed to cook the food in each container in different modes. The air-fryer of Zhang is designed for this very purpose to implement two cooking operations in separate cooking zones as discussed above. EX1010, ¶[0004]-[0005]. It is my opinion that a POSITA would have a reasonable expectation of success in combining Zhang’s device with Conrad’s as doing so merely requires using Conrad’s controller (e.g. Conrad’s controller 216” to control the heating assembly (e.g., motor 41, 42, heating tubes 101, 102, and air fans 31 and 32) of Zhang to implement the different cooking

conditions of Conrad. Conrad's and Zhang provide a similar dual arrangement of air-fryers.

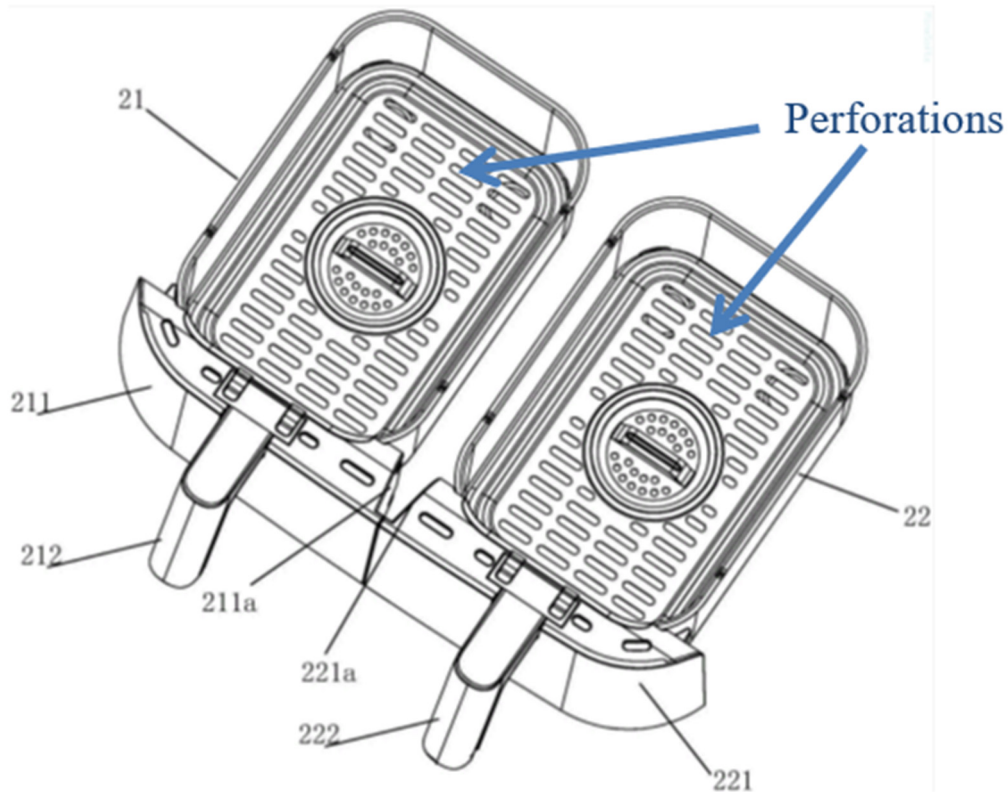
105. For at least these reasons, a POSITA would have understood that the combination of Zhang and Conrad would render obvious “the first and second heating assemblies being programmable to simultaneously cook food in separate cooking modes.”

***Claim 11[k]***

106. It is my opinion that Zhang discloses that “wherein the first and second cooking containers are substantially horizontally coplanar when disposed in the first and second internal cooking compartments respectively.” This is clearly shown in FIGS. 1-6 of Zhang, and evident where “the outer side surfaces of the first and second pot body brackets remain flush”. EX1010, ¶ [0036]. It is my opinion that a POSITA would understand that the arrangement proposed by Zhang would be a substantially horizontally coplanar arrangement.

***Claim 11[l]***

107. It is my opinion that Zhang discloses “wherein the first and second cooking containers have respective first and second perforated bases.” As shown in Zhang, there are perforations in the base of each of the pot bodies 21 and 22. A POSITA would understand that in an air fryer the perforations allow for the circulation of the air around the food.



108. Accordingly, it is my opinion that Zhang in view of Conrad renders claim 11 obvious under 35 U.S.C. §103.

## **B. Claim 12**

109. Claim 12 recites “wherein the first cooking container includes a first external handle attached thereto and the second cooking container includes a second external handle attached thereto. Claim 12 depends on claim 11 and therefore my above discussions of claim 11 are repeated and incorporated by reference to the extent the discussions apply to claim 12.

110. I incorporate here the same analysis with respect to Zhang’s teachings of the limitations of claim 7 discussed in Ground 1. The addition of Conrad does

not impact Zhang's teachings with respect to claim 12. It is my opinion that Zhang in view of Conrad renders obvious claim 12, which depends on claim 11.

### **C. Claim 13**

111. Claim 13 depends on claim 12 and therefore my above discussions of claim 12 are repeated and incorporated by reference to the extent the discussions apply to claim 13.

#### ***Claim 13[a]***

112. Zhang discloses "wherein the first internal cooking compartment and the second internal cooking compartment are independently operable to cook food." Zhang states that dual arrangement of the air fryers allows two cooking operations at the same time, while differentiating Zhang's system from air fryers that can't cook "two different types of food or perform two different types of cooking procedures".

EX1010, ¶[0004]-¶[0005]. Zhang's system is thereby described as having

the advantages of the invention include: by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. Although not labelled, it is my opinion that a POSITA viewing FIG. 1 would understand that there is a user interface and thus the cooking operations are programmable and independently operable.

***Claim 13[b]***

113. Zhang discloses “using at least one of conduction, convection, radiation, and induction.” Zhang uses electric heating tubes and air fans as discussed above. EX1010, ¶[0038]. The configuration of Zhang is a convection cooking method as known to those of ordinary skill in the art and in the same manner of the ’026 Patent. *See* EX1001; 9:46-10:2.

**D. Claim 14**

114. Claim 14 depends on claim 11 and therefore my above discussions of claim 11 are repeated and incorporated by reference to the extent the discussions apply to claim 14.

115. It is my opinion that the combination of Zhang in view of Conrad renders obvious claim 14.

***Claim 14[a]***

116. To the extent that the Patent Owner incorrectly disputes whether Zhang explicitly discloses “a control system configured to operate the first and second cooking assemblies,” Conrad nonetheless discloses this feature. Conrad discloses a “controller 216 which is communicatively coupled to the cooking devices (e.g. heating elements 120, air movers, 124, and steam generators 136) associated with the plurality of cooking zones (e.g. first and second zones 180<sub>1</sub> and 180<sub>2</sub>) defined within cooking chamber 104.” EX1014, ¶162. A POSITA would recognize the

benefits to have a control system configured to operate the first and second cooking assemblies to cook the food in each container in different modes. My motivation to combine Zhang and Conrad discussed above with respect to 11[j] in Ground 2 is incorporated by reference and applies here as well.

***Claim 14[b]***

117. To the extent that Patent Owner incorrectly disputes whether Zhang explicitly discloses “the control system being configured to receive inputs corresponding to at least one of a temperature, a cook time, and a food type,” Conrad nonetheless discloses this feature. Conrad discloses that the controller 216 produces “different cooking conditions (temperature, convective air speed, and/or humidity) in the two cooking zones 180.” EX1014, ¶164. In particular, Conrad teaches receiving inputs through the controller 216 to execute a cooking program, which may be “stored in memory within controller 216, and selected by the user.” EX1014, ¶223. A POSITA would recognize the benefits to have the controller receive inputs that correspond to a temperature since the temperature is necessary to cooking food. My motivation to combine Zhang and Conrad discussed above with respect to 11[j] is incorporated by reference and applies here as well.

118. For at least these reasons, a POSITA would have understood that the combination of Zhang and Conrad would render obvious “a control system configured to operate the first and second cooking assemblies, the control system

being configured to receive inputs corresponding to at least one of a temperature, a cook time, and a food type.”

**E. Claim 17**

119. Claim 17 depends on claim 16 and therefore my above discussions of claim 16 are repeated and incorporated by reference to the extent the discussions apply to claim 17.

120. It is my opinion that Zhang discloses *claim* 17, which “a control system configured to operate cooking processes of food contained in the first and second cooking containers.” Zhang states that dual arrangement of the air fryers allows two cooking operations at the same time, while differentiating Zhang’s system from air fryers that can’t cook “two different types of food or perform two different types of cooking procedures”. EX1010, ¶¶[0004]-¶¶[0005]. Although not labelled, a POSITA viewing FIG. 1 would understand that there is a user interface and associated controller which operates as a control system.

121. To the extent that Patent Owner incorrectly disputes whether Zhang explicitly discloses “a control system configured to operate cooking processes of food contained in the first and second cooking containers,” Conrad nonetheless discloses this feature. As discussed above Zhang and Conrad both disclose an air-fryer with dual cooking zones. Conrad discloses that the controller 216 produces “different cooking conditions (temperature, convective air speed, and/or humidity)

in the two cooking zones 180.” EX1014, ¶164. A POSITA would recognize the benefits to have a control system configured to operate the first and second cooking assemblies to cook the food in each container in different modes. My motivation to combine Zhang and Conrad discussed above with respect to 11[j] in Ground 2 is incorporated by reference and applies here as well.

**F. Claim 18**

122. Claim 18 depends on claim 17 and therefore my above discussions of claim 17 are repeated and incorporated by reference to the extent the discussions apply to claim 18.

***Claim 18[a]***

123. It is my opinion that Zhang discloses “wherein the control system is configured to independently operate the first and second heating elements.” Zhang states that dual arrangement of the air-fryers allows two cooking operations at the same time, while differentiating Zhang’s system from air fryers that can’t cook “two different types of food or perform two different types of cooking procedures”.

EX1010, ¶[0004]-¶[0005].Zhang further states:

Compared with the prior art, the advantages of the invention include: by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. In order to operate the air fryer with two cooking operations a POSITA would understand the control system would need to operate the heating element independently.

***Claim 18[b]***

124. It is my opinion that Zhang discloses “wherein the control system is configured to independently operate ... the first and second fans.” Zhang states that dual arrangement of the air-fryers allows two cooking operations at the same time, while differentiating Zhang’s system from air fryers that can’t cook “two different types of food or perform two different types of cooking procedures”. EX1010, ¶[0004]-¶[0005]. Zhang further states:

Compared with the prior art, the advantages of the invention include: by arranging the first pot body and second pot body independently, two cooking operations can be performed simultaneously, and the integrated furnace chamber inner pan structure saves material costs and improves assembly efficiency.

EX1010, ¶[0021]. In order to operate the air fryer with two cooking operations the control system would need to operate the air fans independently.

**G. Claim 19**

125. It is my opinion that the combination of Zhang and Conrad renders obvious claim 19, which depends on claim 17. Conrad discloses “the control system is configured to receive inputs corresponding to at least one of a temperature, a cook time, and a food type.” EX1014, ¶164. Moreover, Conrad discloses “different

cooking conditions (temperature, convective air speed, and/or humidity) in the two cooking zones 180.” A POSITA would recognize the benefits to have the controller receive inputs that correspond to a temperature since the temperature is necessary to cooking food. My motivation to combine Zhang and Conrad discussed above with respect to 11[j] in Ground 2 is incorporated by reference and applies here as well.

**X. GROUND 3: OBVIOUSNESS OF CLAIMS 1-4, 7-9, AND 11-19**

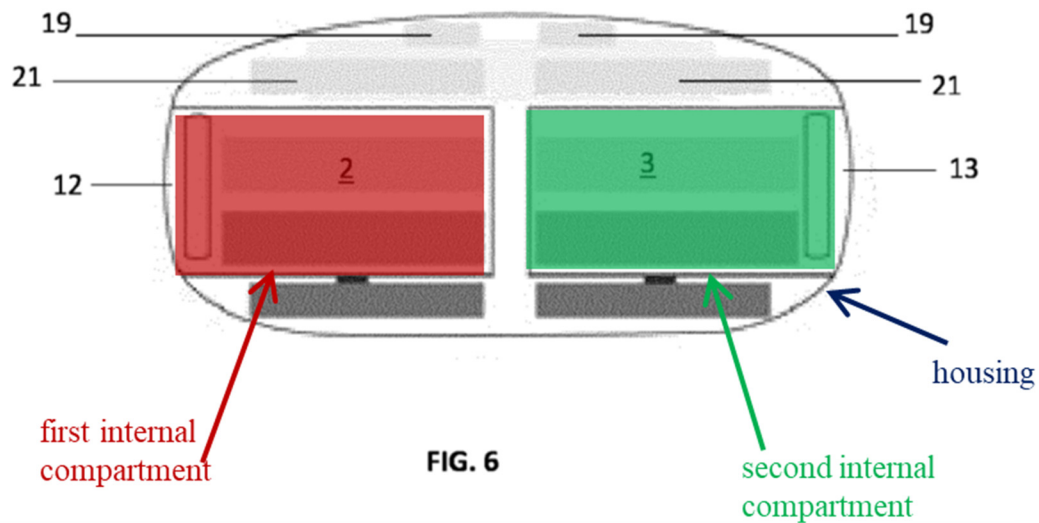
**A. Claim 1**

***Claim 1[pre]:***

126. To the extent the preamble is limiting, it is my opinion that Philips discloses limitation 1[pre]. Philips discloses a cooking system, disclosing a “table top cooking device” comprising two food preparation chambers that can operate simultaneously and independently to prepare food. EX1012, 4:19-25, Fig. 6; 10:9-22.

***Claim 1[a]***

127. Philips discloses a housing having a first internal compartment and a second internal compartment:



EX1012, Fig. 6. Philips discloses “table top kitchen device with two food preparation chambers 2, 3, both chambers being arranged for air frying food that in use may be disposed therein. EX1012, 11, 9-13. As shown in Figure 6 reproduced and annotated above, the food chambers are within a housing. It is my opinion that a POSITA would recognize that the preparation chambers are held within a housing. As stated in the ‘026 Patent, the housing 22 is the outer portion of the fryer 22.

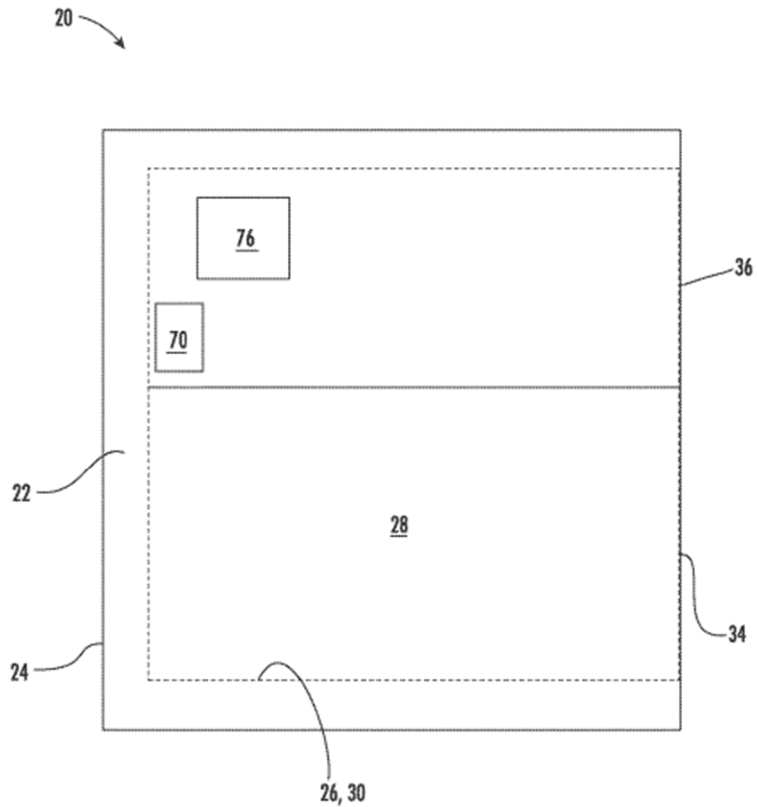


FIG. 3

EX1001, 7:65-8:7; Figure 3. Moreover, Philips is clear that the housing has a first internal compartment 2 and a second internal compartment 3:

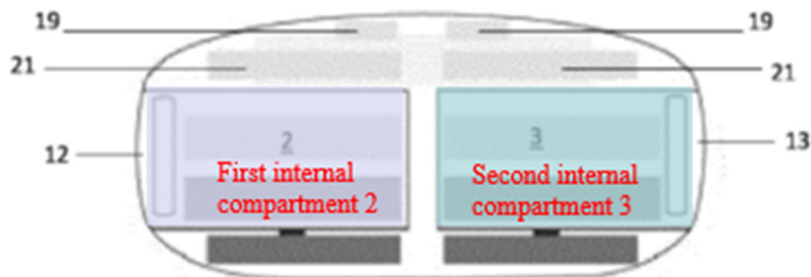


FIG. 6

EX1012, Figure 6 (annotated); 11:9-25.

128. Philips further states that the food preparation chambers 2, 3 “may be accommodated in a container 12, 13 which may for instance be removably mounted in a **support structure** 8, for instance like a drawer.” EX1012, 11:23-25. Although not drawn in Figure 6, an example of a support structure in Philips is shown in Fig. 7B, which shows a support structure is a housing that holds the cooking containers in other embodiments:

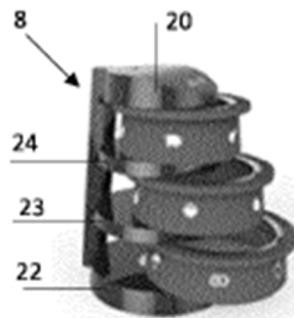


FIG. 7B

129. Philips teaches “Depending on the design of the support structure 8, the food preparation chambers 1, 2, 3 may be stacked, as illustrated in FIGS 1-5 and 7, or arranged side by side as illustrated in FIG. 6. Of course, a combination is possible, wherein some food preparation chambers are arranged side by side and others are stacked.” EX1012, 6:9-12. As such, support structure 8 also applies to Fig. 6 of Philips. Accordingly, it is my opinion that a POSITA would recognize this support

structure to meet the limitations of the claimed housing. Thus, it is my opinion that Philips discloses this limitation.

***Claim 1[b]:***

130. Philips discloses “a first cooking container defining a first cooking volume.” Philips discloses that “*each food preparation chambers 2, 3 may be accommodated in a container 12, 13 which may for instance may be removable mounted for instance like a drawer.*” EX1012, 11:19-25; Figure 2 (annotated)

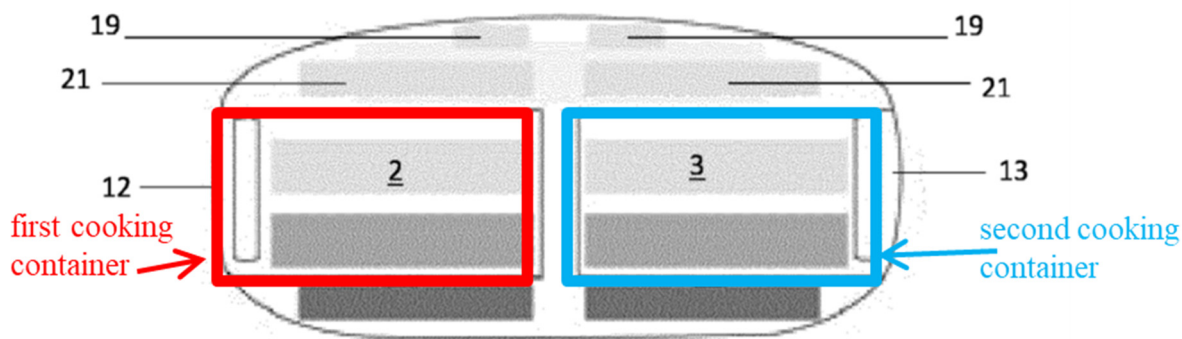


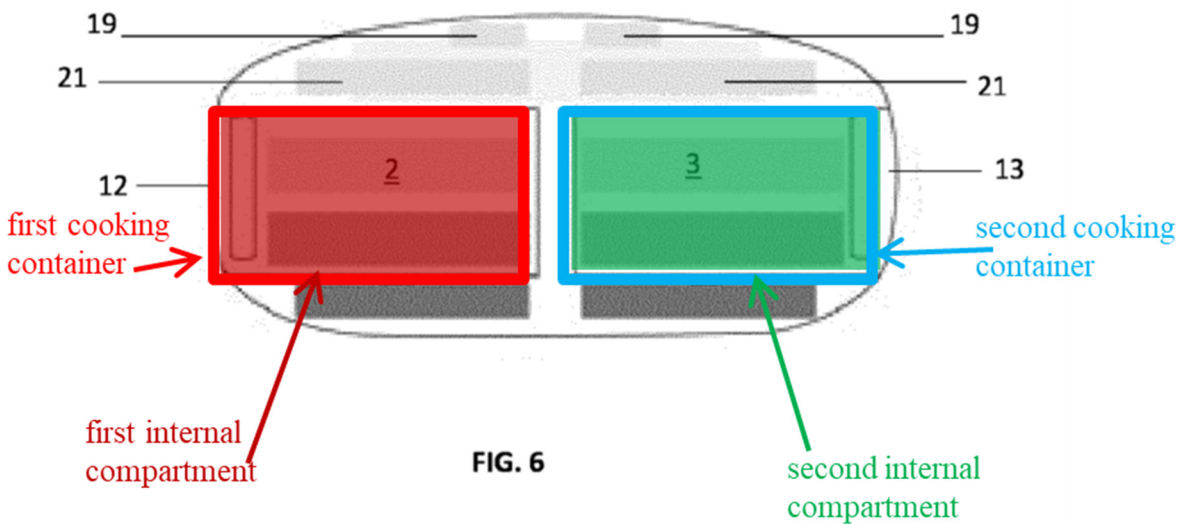
**FIG. 6**

131. A POSITA would understand that the “first container defining a first cooking volume” would be met by the containers 12 and 13 disclosed in Philips. Thus, Philips discloses this limitation.

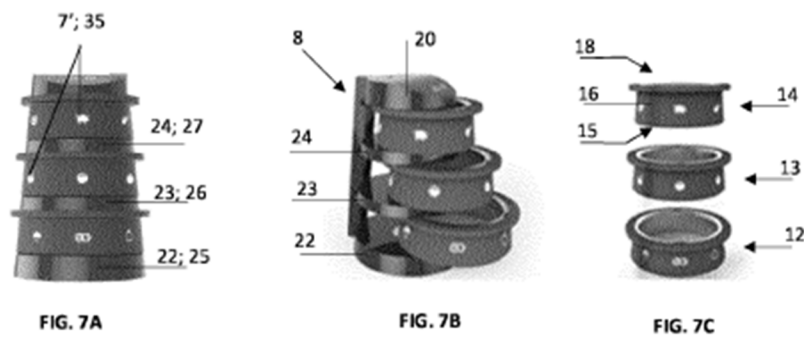
***Claim 1[c]:***

132. It is my opinion that Philips discloses “said first cooking container being removably receivable within said first internal compartment to close off an opening

to said first internal compartment when inserted therein. Philips states that “each food preparation chamber may be accommodated in a container 12, 13 which may for instance be removably mounted in a support structure 8 *for instance like a drawer*. EX1012, 11:19-23; Figure 2 (annotated)



133. It is my opinion that a POSITA would recognize that the first and second container of Philips when closing off like a “drawer” meets the limitation of closing off an opening of the first compartment when inserted. As disclosed in the other embodiments of Philips which are also described as “drawers” it is clear that the containers when inserted close off openings shown above platforms 22, 23 and 24.



EX1012, 8:16-20 (“the containers 12,13,14 can be mounted in a support structure 8 like drawers. The support structure 8 may be provided with platforms 22, 23 and 24 (see FIGS 7A-C)”.

134. It is also clear that Philips teaches that the containers when inserted close off openings when viewing the air flow within the Philips figures. Referring to Fig. 3, Philips teaches

[t]he fan 19 serves to forcefully circulate hot air (heated by the heating means 21) through the food, either in upward or downward direction, so as to fry the food by air. Suitable guiding means may be provided to return the air along an inner periphery of the chamber 4.

EX1012, 10:21-24. Referring to Fig. 4, Philips teaches:

a fluid connection 30 is provided between the third food preparation chamber 4 and the base 1. Thanks to this fluid connection 30, part of the hot air that in use is circulated in the third food preparation 4 can be guided to the base 1 where it may subsequently be used for instance to heat the other chambers 2, 3.

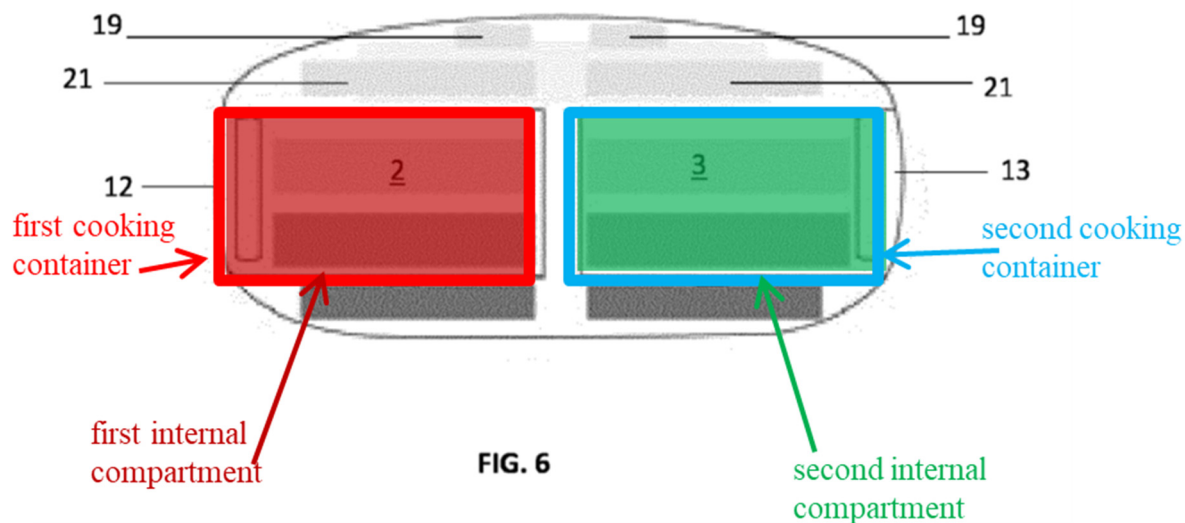
EX1012, 10:32-11:2. Referring to Fig. 6, Philips teaches: “Each chamber 2, 3 may comprise a heating element 21 and a fan 19, for forcefully circulating hot air through

the food.” EX1012, 10:13-15. A POSITA would understand that, were the containers not “closed off”, then Philips desired function of air circulation would not occur because air would leak out via the openings in a non-closed-off system.

135. Thus, it is my opinion that Philips discloses this limitation.

***Claim 1[d]:***

136. Similar to the first cooking container, Philips also discloses a second cooking container defining a second cooking volume.” Philips discloses that “*each food preparation chambers 2, 3 may be accommodated in a container 12, 13 which may for instance may be removable mounted.*” EX1012, 11:19-23; Figure 2 (annotated). As shown below, there are two food containers 12 and 13 disclosed in two food volumes 2 and 3.

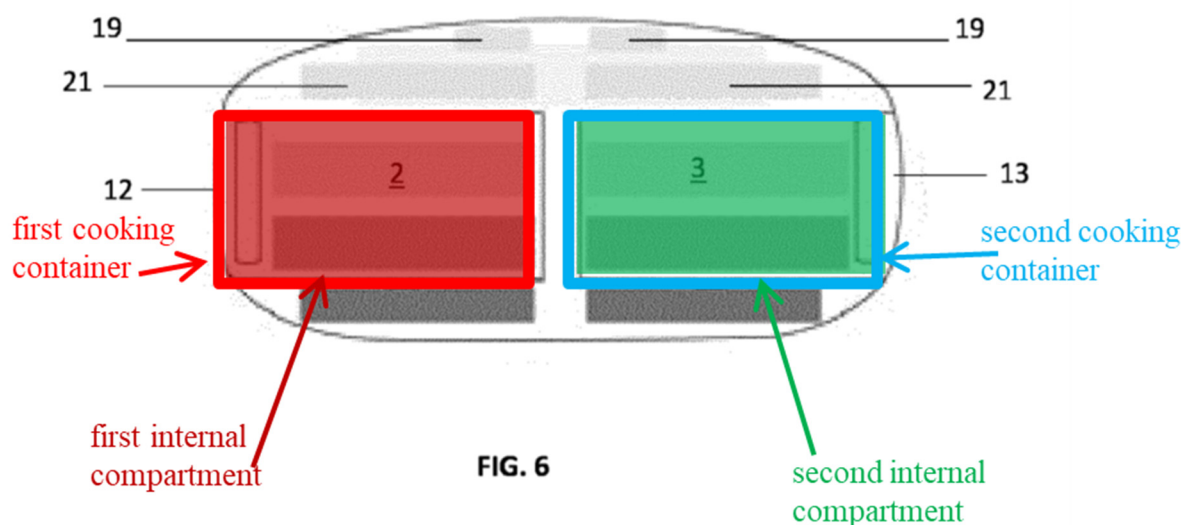


137. It is my opinion that a POSITA would understand that the “second container defining a second cooking volume” would be met by one of the containers

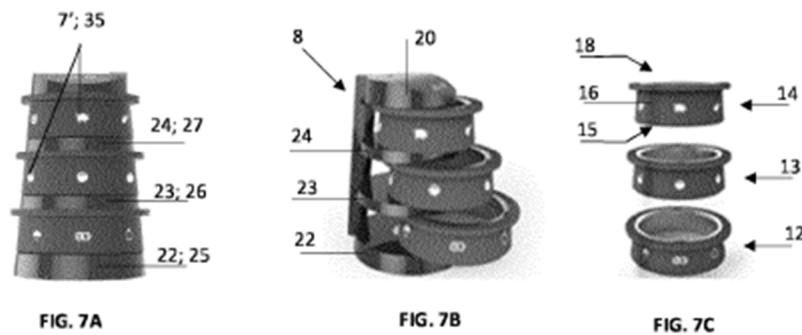
12 and 13 disclosed in Philips (e.g. first container is disclosed by first container 12 and first cooking volume 2 and second container is disclosed by second container 13 and second cooking volume 3). Thus, it is my opinion that Philips discloses this limitation.

***Claim 1[e]:***

138. It is my opinion that Philips discloses “said second cooking container being removably receivable within said second internal compartment to close off an opening to said first internal compartment when inserted therein.” Philips states that “each food preparation chamber may be accommodated in a container 12, 13 which may for instance be removably mounted in a support structure 8 *for instance like a drawer*. EX1012, 11:19-25; Figure 2 (annotated)



139. A POSITA would recognize that the first and second container of Philips when closing off like a “drawer” meets the limitation of closing off an opening of the first compartment when inserted. As disclosed in the other embodiments of Philips which are also described as “drawers” it is clear that the containers when inserted close off openings shown above platforms 22, 23 and 24.



EX1012, 8:16-20 (“the containers 12,13,14 can be mounted in a support structure 8 like drawers. The support structure 8 may be provided with platforms 22, 23 and 24 (see FIGS 7A-C)”).

140. It is also clear that Philips teaches that the containers when inserted close off openings when viewing the air flow within the Philips figures. Referring to Fig. 3, Philips teaches

[t]he fan 19 serves to forcefully circulate hot air (heated by the heating means 21) through the food, either in upward or downward direction, so as to fry the food by air. Suitable guiding means may be provided to return the air along an inner periphery of the chamber 4.

EX1012, 10:21-24. Referring to Fig. 4, Philips teaches:

a fluid connection 30 is provided between the third food preparation chamber 4 and the base 1. Thanks to this fluid connection 30, part of the hot air that in use is circulated in the third food preparation 4 can be guided to the base 1 where it may subsequently be used for instance to heat the other chambers 2, 3.

EX1012, 10:32-11:2. Referring to Fig. 6, Philips teaches: “Each chamber 2, 3 may comprise a heating element 21 and a fan 19, for forcefully circulating hot air through the food.” EX1012, 10:13-15. A POSITA would understand that, were the containers not “closed off”, then Philips desired function of air circulation would not occur because air would leak out via the openings in a non-closed-off system.

141. Thus, it is my opinion that Philips discloses this limitation.

***Claim 1[f]:***

142. It is my opinion that Philips in view of Moon discloses this limitation. Philips discloses that the container 12,13 may be “removably mounted” like a drawer. EX1012, 11:23-25. A POSITA would recognize that a common drawer creates a continuous surface with its housing, such as a dresser when its drawers are closed creates a continuous surface with the drawers (“cooking containers” and remainder of dresser (“housing”).



143. Further, in the context of appliances, and in particular air fryer appliances, a POSITA would recognize that a “drawer” system when closed would create a continuous surface in order to maintain an efficient seal. Philip’s schematic diagram Fig. 6 includes the physical separation between food preparation chambers 2 and 3 and would at least be schematically represented by the outer line. EX1012, 11:9-13; FIG. 2.



FIG. 6

144. To the extent Philips does not expressly disclose the limitation of “the first and second cooking containers each forming a continuous outer surface with the housing when the first and second cooking containers are inserted into the first and second internal compartments respectively,” Philips in view of Moon discloses this feature. Moon describes a drawer-style cooking container that “fits securely within the cooking chamber and substantially seals the chamber against heat loss during use,” thereby forming a continuous outer surface between the cooking container and the housing. Ex. 1013, Claim 1; [0038]; Fig. 3. Particularly, Moon states that “the cooking chamber 14 is fully occupied by the fitted cooking drawer 16. In a closed position, the drawer seals the chamber 14 to prevent the escape of heat.” EX1013, [0038]. While the images in Moon show the air fryer with the drawer open, a POSITA (as well as the ordinary observer) would recognize that the drawer has been designed to mate with the outer surface of the housing to form a continuous surface.

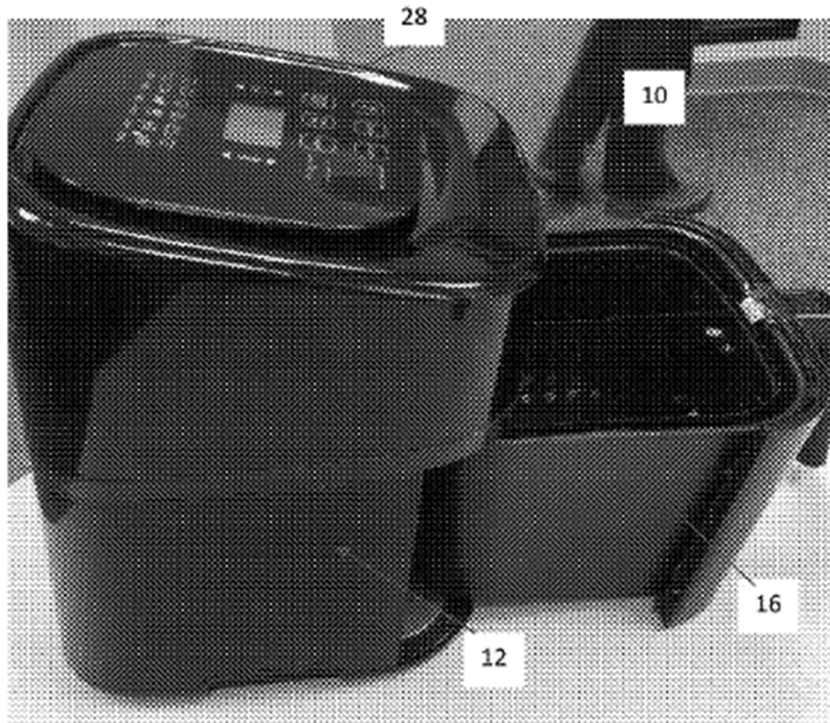


FIG. 3

145. It is my opinion that a POSITA would have understood that modifying the sealed drawer design of Moon into Philips's system would achieve the claimed configuration and created cooking containers that, when closed into the housing, form "a continuous outer surface with the housing".

146. It is my opinion that a POSITA would have been motivated to make this combination because a continuous outer surface provides a tighter seal, which in turn reduces air leakage, improves internal air circulation, and increases heating efficiency. Philips shares the concern of assuring air flow is evenly distributed and that heat is distributed evenly over the food within the two food preparation chambers. EX1012, 11:19-25. As discussed by Moon, creating a seal with a

continuous outer surface prevents the escape of heat. EX1013, [0038]. The sealed design also enhances safety by reducing exposure to hot air and steam.

147. Further, as Moon shows, drawer-style continuous-surface designs were commonplace in countertop air fryers at the time of the alleged invention. The use of a “continuous outer surface” between a removable container and the remaining housing was well-known with respect to single-container air fryers and using this configuration in dual-container air fryers is not inventive but common design practice. *See, e.g.*, EX1015, Fig. 4; EX1016, Fig. 1. A POSITA would have viewed the integration of Moon’s drawer configuration into Philips as a predictable application of known design principles to achieve expected benefits.

148. It is my opinion that a POSITA also would have had a reasonable expectation of success in combining these teachings. Drawer-style continuous-surface designs were well known and required only routine adaptation to implement in Philips’s multi-container system. *See, e.g.*, EX1015, Fig. 4; EX1016, Fig. 1. Nothing in either reference teaches away from such a modification; to the contrary, both references emphasize reducing heat loss and improving cooking performance. EX1012, 11:19-22. Philips expressly teaches to implement a drawer-like configuration. EX1012, 11:23-25. Thus, it is my opinion that a POSITA would have reasonably expected that combining Moon’s drawer configuration with Philips’s air

fryer would yield the predictable result of forming a continuous outer surface with improved thermal performance and user safety.

***Claim 1[g]:***

149. It is my opinion that Philips discloses “a first heating element and a second heating element disposed in said housing.” Philips discloses heating elements 21 and 23 are located above respective cooking volumes 2 and 3. EX1012, 11:14-17 Figure 6. As shown below, Philips discloses “the chambers 2, 3 may each include their own heating element 21.” EX1012, 11:15-16.



**FIG. 6**

***Claims 1[h] and 1[i]:***

150. It is my opinion that Philips discloses that its first and second heating elements are each in thermal communication with the respective first and second cooking volumes. Philips discloses that “each food preparation chamber 2, 3” may

include suitable air guide elements to guide the air circulation according to a predetermined pattern, wherein preferably the air flow is evenly distributed through the food so that *the heat* from the air flow is evenly transferred.” EX1012, 11:20-22. As stated in previous limitations, the heating elements are located above each chamber “for forcefully circulating hot air through the food.” EX1012, 11:14-17. A POSITA would understand the heating elements above each cooking volume (chambers 2, 3 of Philips) would be in thermal communication to be able to circulate hot air within the container that is placed within the chamber.

***Claim 1[j]:***

151. It is my opinion that Philips discloses “the first and second heating elements being independently operable to independently cook food contained within the first and second cooking containers.” Philips states that dual arrangement of the air fryers allows two cooking procedures at the same time (two food chambers can be set independently). EX1012, 11:12-15, Fig. 6. Each food chamber has “its own heating element 21.”



**FIG. 6**

152. Philips states "In some embodiments, at least one of the following cooking parameters can be set and controlled independently per food preparation chamber: the temperature, the air flow rate, the cooking time, the humidity, the pressure." EX1012, 6:9-11. While this is in a summary section, the POSITA would understand that disclosure applies to the embodiment of Philips' Fig. 6 because Philips states: "The chambers are arranged side by side and are physically separated such that the cooking parameters in the food preparation chambers 2, 3 can be set independently." EX1012, 11:11-13. Philips states:

[t]o that end, the base 1 may for instance include a heating element 5, a fan 6, a vent (not shown), a water reservoir, a user interface 7 and/or a processor (not shown). The fan 6 may be used to circulate air through one or more of the food preparation chambers. ... The user interface 7 may allow a user to enter desired cooking conditions (cooking method, cooking parameter) per food preparation chamber and may provide the user with feedback, for example on the actual cooking conditions in each food preparation chamber.

EX1012, 7:18-32; *see also* claim 7. It is my opinion that a POSITA would understand that to set and control “temperature” differently, the device would independently operate the heating element according to the set temperature.

***Claim 1[k]:***

153. Philips discloses “a first fan and a second fan disposed in said housing.” Philips describes that “the fan 19 and heating element 21 may for instance be situated above or in an upper part of each chamber 2, 3.” EX1020 11:14-15, Fig. 6.

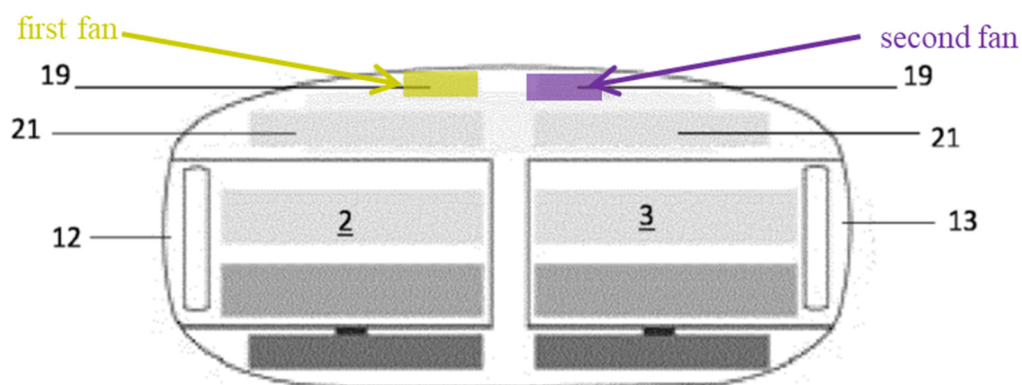


**FIG. 6**

154. Philips states "In some embodiments, at least one of the following cooking parameters can be set and controlled independently per food preparation chamber: the temperature, *the air flow rate*, the cooking time, the humidity, the pressure." EX1012, 6:9-11. Philips states:

[t]o that end, the base 1 may for instance include a heating element 5, a fan 6, a vent (not shown), a water reservoir, a user

interface 7 and/or a processor (not shown). The fan 6 may be used to circulate air through one or more of the food preparation chambers. ... The user interface 7 may allow a user to enter desired cooking conditions (cooking method, cooking parameter) per food preparation chamber and may provide the user with feedback, for example on the actual cooking conditions in each food preparation chamber.

EX1012, 7:18-32. Thus, it is my opinion that Philips discloses this limitation.

***Claim 1[l]:***

155. It is my opinion that Philips discloses “said first fan being in fluid communication with said first cooking volume.” Philips discloses that each fan is attached so that “each food preparation chamber 2, 3 may include suitable air guide elements to guide the air circulation according to a predetermined pattern.” EX1012, 11:19-20. A POSITA would understand that the fan 19 is in fluid communication with first cooking volume (e.g. food preparation chamber 2) which allows air flow from the fan to be “evenly distributed.”

***Claim 1[m]:***

156. Philips discloses “said second fan being in fluid communication with said second cooking volume.” As disclosed above, Philips teaches that each food preparation chamber (cooking volume) has a fan 19. EX1012, Fig. 6. Philips discloses that each fan is attached so that “each food preparation chamber 2, 3 may include suitable air guide elements to guide the air circulation according to a predetermined pattern.” EX1012, 11:19-20. It is my opinion that a POSITA would

understand that the second fan 19 is in fluid communication with second cooking volume (e.g. food preparation chamber 3) which allows air flow from the fan to be “evenly distributed.”

**B. Claim 2**

157. Claim 2 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 2.

158. It is my opinion that Philips discloses “wherein said first cooking container and said second cooking container are individually insertable into said first cooking compartment and said second cooking compartment respectively.” Philips teaches that each food preparation chamber 2, 3 may be accommodated in a container 12 and 13 which may “be removably mounted into a support structure 8 of the device, for instance like a drawer.” EX1012, 11:23-25; *see also* 11:9-18. It is my opinion that a POSITA would understand that the food preparation containers of Philips are individually insertable.

**C. Claim 3**

159. Claim 3 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 3.

160. It is my opinion that Philips discloses claim 3, which recites “wherein said first internal compartment and said second internal compartment are fluidly separate.” Philips states that each food preparation chamber is “arranged side by side

and is “physically separated” such that food can be set (cooked) independently. EX1012, 11:11-12. Further, Philips states that each chamber can circulate air via air guide elements. Id, 11:19-22. It is my opinion that a POSITA would recognize the physical separation, complemented with the respective air guide elements would keep the first and second food preparation chambers of Philips fluidly separate.

**D. Claim 4**

161. Claim 4 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 4. It is my opinion that Philips discloses claim 4.

***Claim 4[a]***

162. Philips discloses “wherein said first fan is stacked vertically relative to said first heating element within said housing.” Philips states that the “fan 19 and heating element 21 may for instance be situated above... each chamber 2, 3.” EX1012, 13-14. Based on the FIG. 6, below, a POSITA would understand that the vertical stacking is taught by Philips.

***Claim 4[b]***

163. Philips discloses “said second fan is stacked vertically relative to said second heating element within said housing.” Philips states that the “fan 19 and heating element 21 may for instance be situated above... each chamber 2, 3.”

EX1012, 13-14. Based on the FIG. 6, a POSITA would understand that vertical stacking is taught by Philips.

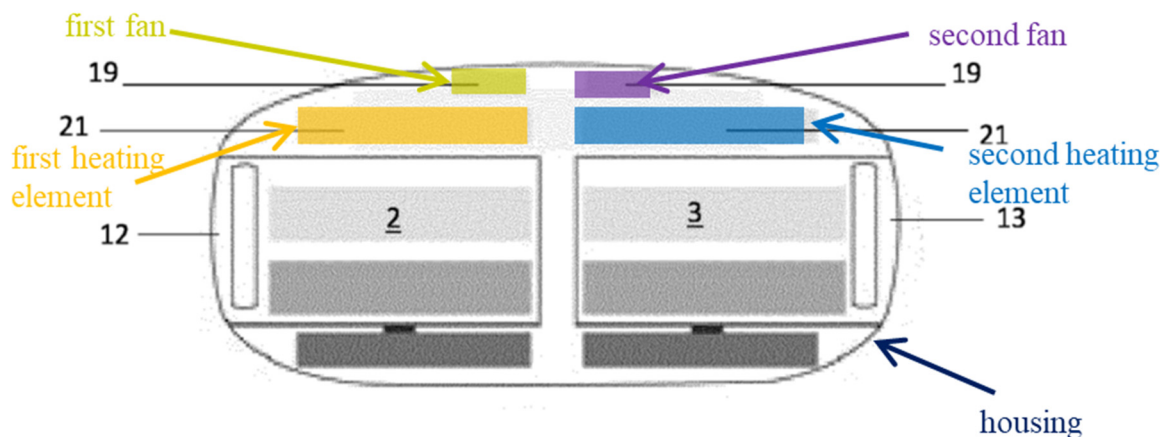


FIG. 6

#### E. Claim 7

164. Claim 7 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 7. It is my opinion that Philips in view of Moon renders obvious claim 7.

#### *Claim 7[a]*

165. Philips discloses “wherein said first cooking container includes a first handle.” As shown in FIG.6, Philips appears to show a handle that is attached to the removable containers that are placed within the dual food preparation chambers.

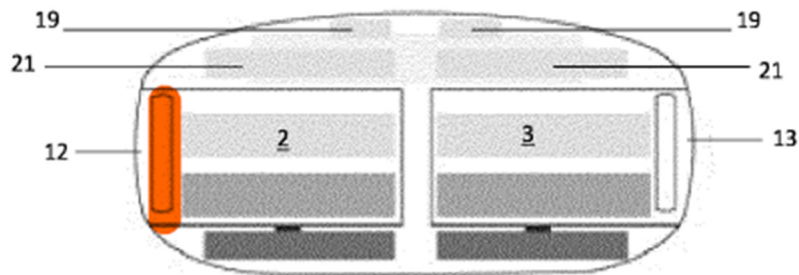


FIG. 6

166. To the extent a first handle is not expressly disclosed, Moon expressly discloses a handle. Moon describes a “handled food basket” which detachably secures to the cooking drawer. EX1013, abstract, [0009], Figs. 2, 10-13, [0033] and [0038].

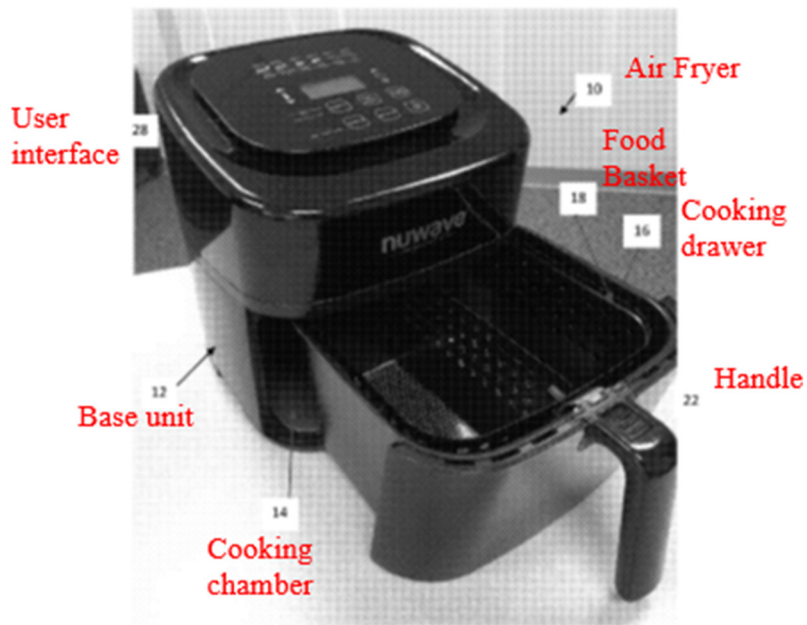


FIG. 2

See. e.g. EX1013, Fig. 2 (annotated).

167. It is my opinion that a POSITA would have been motivated to modify the Philips air fryer reference to include a handle on the containers that hold food in each air fryer chamber. A POSITA would be motivated to add a handle to each container in order to increase safety for the user to avoid having to directly handle the container that is exposed to internal heat. As demonstrated by at least Moon, it was well known in the art of cooking appliances to provide handles on food containers, baskets, or trays exposed to high heat to facilitate safe insertion, removal, and transport of food. For example, deep fryer baskets, roasting pans, and convection oven trays each incorporate handles for this very purpose. It is my opinion that a POSITA would have understood that adding a handle to the food container of Philips' air fryer would provide the predictable and desirable benefits of improved safety, ease of use, and consumer convenience.

168. Further, manufacturers of consumer kitchen appliances faced strong design incentives to enhance ergonomics and user safety. As stated in Moon, air fryers operating at high temperatures can create safety issues. EX1013, [0006]. A POSITA would therefore have been motivated to apply the well-known handle feature to Philips' air fryer containers so that each chamber could be accessed independently without risk of burning or requiring auxiliary tools such as oven mitts or tongs. This modification would have been nothing more than the predictable

application of a known design element to an analogous device as handles are commonplace in air-fryer technology at the time of invention. *See* EX1013; EX1016.

169. It is my opinion that a POSITA would also have had a reasonable expectation of success in implementing this modification of adding Moon's handle to the dual air fryer disclosed in Phillips. Handles were a routine and predictable structural feature in the field, and adding a handle to the food container in Phillips would not require undue experimentation or inventive skill. *See* EX1013; EX1016. The modification would not interfere with the air fryer's heating, air circulation, or cooking functions as the handle is external to the food container (EX1013, claim 1) and suitable heat-resistant handle materials were readily available at the time of the invention. Thus, a POSITA would have expected that adding a handle would predictably result in a safe and convenient means for manipulating the food container, consistent with the purposes and functions of Phillips' air fryer.

170. Thus, it is my opinion that Phillips in view of Moon discloses this limitation.

***Claim 7[b]***

171. It is my opinion that Phillips discloses "wherein said second cooking container includes a second handle." As shown in FIG.6, Phillips appears to show a handle is attached to the removable containers that are placed within the dual food preparation chambers.

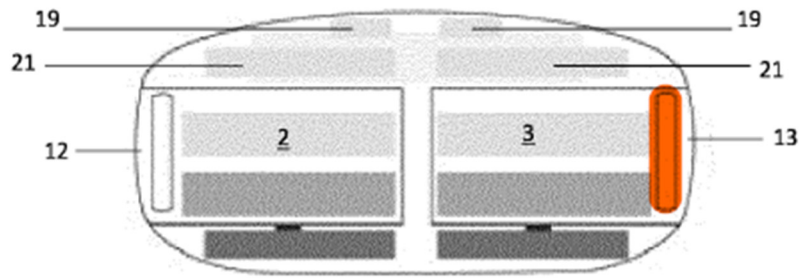


FIG. 6

See EX1012, Fig. 6 (annotated).

172. To the extent a second handle is not expressly disclosed, Moon expressly discloses a handle which could be added to each food container of Philips. Moon describes a “handled food basket” which detachably secures to the cooking drawer. EX1013, abstract, [0009], Figs. 2, 10-13, [0033] and [0038]. The same motivation to combine and reasonable expectation of success to modify Philips to add the handle of Moon to each of Philip’s respective food containers 12 and 13 as illustrated in claim 7[a] applies here to limitation 7[b] and is incorporated by reference.

#### F. Claim 8

173. Claim 8 depends on claim 1 and therefore my above discussions of claim 1 are repeated and incorporated by reference to the extent it applies to claim 8. It is my opinion that Philips in view of Moon discloses claim 8.

174. It is my opinion that Philips discloses claim 8, which recites “a motor operably coupled to each of said first fan and said second fan.” Philips teaches that

the fan provides air flow which is evenly distributed over the food. EX1012, 15-21. It is my opinion that POSITA would understand that Philips reference to a “fan” includes a motor. Philips is an electronic air fryer. It is my opinion that a POSITA understands that these fans are coupled to motors which are controlled to allow air flow to occur. *See e.g.*, EX1015, [0005](“An air fryer, comprising ... blade motor, ... hot-air blade”); *See* EX1011.

175. To the extent the Philips reference does not expressly disclose a motor, a person of ordinary skill in the art (“POSITA”) would have understood that a motor is inherently included. The Philips reference describes a fan for circulating hot air within the cooking chamber. EX1012, 11:15-21. It is my opinion that a POSITA would know that such a fan cannot operate without a motor to drive it. Further, I am not aware of any commercially available fans, such as might be incorporated into an air fryer, that are sold without a motor as part of the fan. Thus, a POSITA would understand that by specifying a fan, Philips also specifies the motor that, more likely than not, is a component part of that fan.

176. At the time of the invention, it was well established in the field of cooking appliances that air fryers and convection ovens rely on forced air circulation. Heating elements generate hot air, and a motor-driven fan distributes that air evenly throughout the cooking volume. Thus, to the extent not expressly disclosed, the motor is inherently present in the Philips device, because the described

functionality cannot occur without it. Here, the operation of the fan to circulate heated air necessarily requires a motor.

177. Accordingly, a POSITA would have understood that a motor is included in Philips, and to the extent not expressly disclosed, the motor is inherently disclosed by Philips because it is required to achieve the described operation. It is thus my opinion that a POSITA understands that the motor would be coupled to the fan to circulate air.

#### **G. Claim 9**

178. Claim 9 depends on claim 8 and therefore my above discussions of claim 8 are repeated and incorporated by reference to the extent it applies to claim 9. It is my opinion that Philips in view of Moon discloses claim 9.

179. Philips discloses claim 9, which depends on claim 8, and recites “wherein said motor is located externally from said first internal compartment and said second internal compartment.” Philips teaches that the fans 19 and heating elements 21 are external to the food containers 12 and 13. EX1012, Fig. 6; 11:9-25. It is my opinion that POSITA would understand that the motors are needed and included to power the fans and external from the internal compartments. A POSITA would desire to keep the electronics components, such as the motor of the Philips fan out of the internal compartment because that is where the food goes and the

POSITA would desire to keep the motor (and fan blades to the extent possible) away from debris and food while cooking for safety reasons.

#### **H. Claim 10**

180. Claim 10 depends on claim 8 and therefore my above discussions of claim 8 are repeated and incorporated by reference to the extent it applies to claim 10. It is my opinion that Philips in view of Moon discloses claim 10.

181. Philips discloses claim 10, which recites “wherein said motor is positioned between said first internal compartment and second internal compartment.” Philips states that, in reference to Figure 6, “the chambers 2, 3 may each include their own heating element 21 and share a single fan 19.” EX1012, 15-18. A POSITA would understand that the motor included in the single fan 19 is needed to power the fan and would be placed adjacent to the single fan embodiment described in Philips. A POSITA would desire to keep the electronics components, such as the motor of the Philips fan out of the internal compartment because that is where the food goes and the POSITA would desire to keep the motor (and fan blades to the extent possible) away from debris and food while cooking for safety reasons. There are also only a few positions that a motor could actually occupy in relation to the compartments. For example, it could be positioned towards the first chamber side, between the first and second chamber, or towards the second chamber side. At the very least, for the single fan embodiment disclosed by Philips, it would have

been obvious to try positioning the motor between the compartments as that is one of a few possible solutions.

**I. Claim 11**

***Claim 11[pre]***

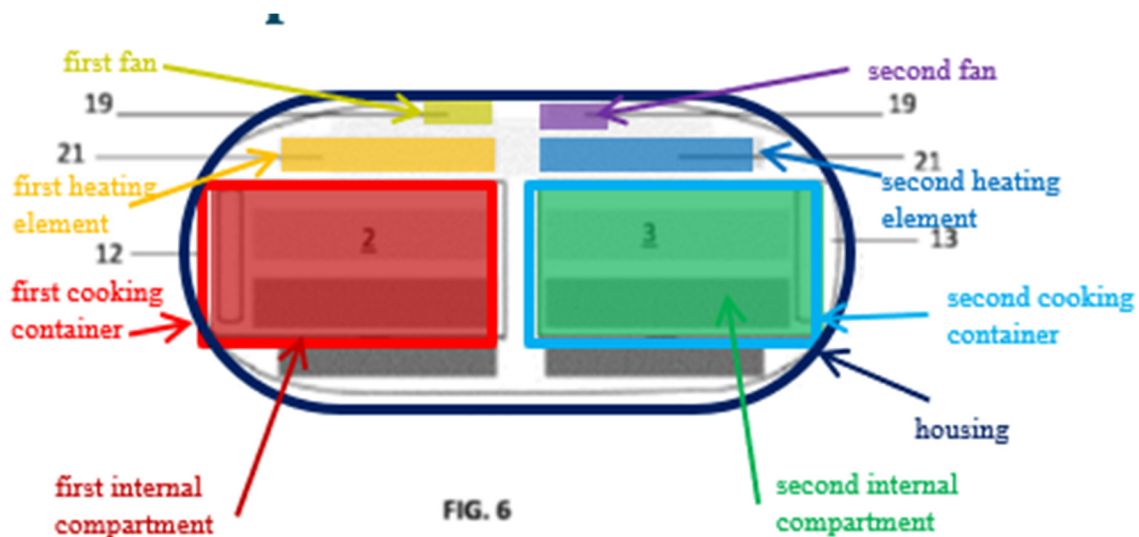
182. My discussion above addressing claim 1[pre] in Ground 3 applies to claim 11[pre] and is repeated and incorporated by reference here.

***Claim 11[a]***

183. My discussion above addressing claim 1[a] in Ground 1 applies to claim 11[a] and is repeated and incorporated by reference here.

***Claim 11[b]***

184. Although 1[a] recites “first internal compartment” and claim 11[b] recites “first internal cooking compartment”, the POSITA would not consider this difference in terms to substantively impact the analysis provide above. As such, the discussion of 1[a] applies equally to limitation 11[b] and is incorporated by reference here.



EX1012, Fig. 6 (annotated)

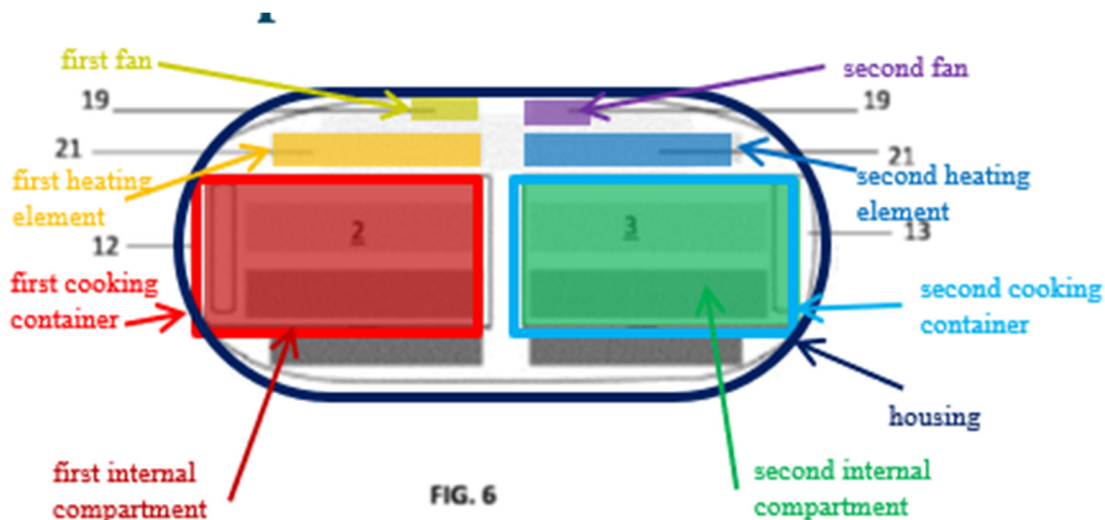
***Claim 11[c]***

185. My discussion above addressing claim 1[c] in Ground 3 applies to claim 11[c] and is repeated and incorporated by reference here.

186. Philips discloses “a first cooking container removably disposed therein.” Philips states that “each food preparation chamber may be accommodated in a container 12, 13 which may for instance be removably mounted in a support structure 8 *for instance like a drawer*. EX1012, 11:19-23.

***Claim 11[d]***

187. My discussion above addressing claim 1[a] in Ground 3 applies to claim 11[d] and is repeated and incorporated by reference here.



***Claim 11[e]***

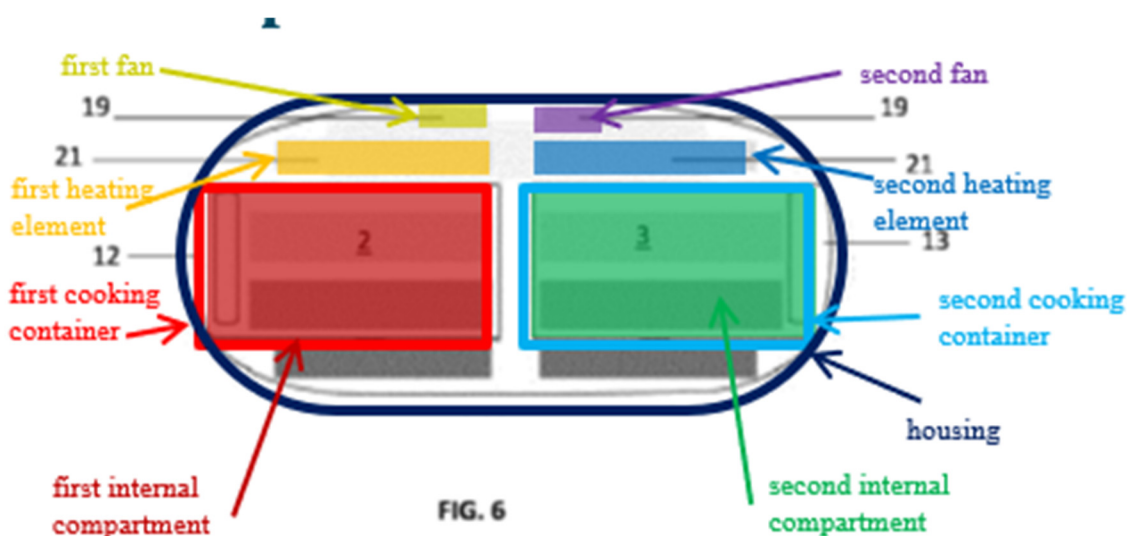
188. My discussion above addressing claim 1[d] in Ground 3 applies to claim 11[e] and is repeated and incorporated by reference here. It is my opinion that Philips discloses “a second cooking container removably disposed therein.”

***Claim 11[f]***

189. My discussion above addressing claims 1[d] and 1[f] in Ground 3 applies to claim 11[f] and are repeated and incorporated by reference here. Although limitation 1[f] recites “the first and second cooking containers each forming a continuous outer surface with the housing when the first and second cooking containers are inserted into the first and second internal compartments respectively” and claim 11 recites “the housing and the first and second cooking containers forming a continuous outer surface”, the discussion of limitation 1[f] is not materially affected as it applies equally and is incorporated by reference here.

***Claim 11[g]***

190. Philips discloses “the first internal compartment including a first heating assembly comprising a first fan and a first heating element configured to cook food disposed in the first cooking container.” Philips discloses a fan 19 and heating element 21 situated above each chamber 2, 3. EX1012, 11:13-15. Philips further discloses that each food preparation chamber includes air guide elements to allow air flow to be evenly distributed through the food so that heat is evenly transferred to the food. EX1012, 11:19-22. As stated in previous limitations, the heating elements are located above each chamber “for forcefully circulating hot air through the food.” EX1012, 11:14-17. It is my opinion that a POSITA would understand the heat distributed to the food would cook the food disposed within the cooking containers 12, 13 that are located within food preparation chambers 2 and 3. EX1012, Figure 6 (annotated).



***Claim 11[h]***

191. Philips discloses “the second internal cooking compartment including a second heating assembly comprising a second fan and a second heating element configured to cook food disposed in the second cooking container.” Philips discloses a fan 19 and heating element 21 situated above each chamber 2, 3, where food preparation chamber 2 represents a first internal cooking compartment and food preparation chamber 3 represents a second internal cooking compartment. EX1012, 11:13-15. Philips further discloses that each food preparation chamber includes air guide elements to allow air flow to be evenly distributed through the food so that heat is evenly transferred to the food. EX1012, 11:19-22. As stated in previous limitations, the heating elements are located above each chamber “for forcefully circulating hot air through the food.” EX1012, 11:14-17. It is my opinion that a POSITA would understand the heat distributed to the food would cook the food disposed within the cooking containers 12, 13 that are located within food preparation chambers 2 and 3. EX1012, Figure 6.

***Claim 11[i]***

192. Although limitation 1[j] recites “the first and second heating elements” and limitation 11[i] recites “the first and second heating assemblies”, the discussion of limitation 1[j] in Ground 3 is not materially affected as it applies equally and is incorporated by reference here.

***Claim 11[j]***

193. Philips discloses “the first and second heating assemblies being programmable to simultaneously cook food in separate cooking modes.” Philips discloses a user interface 7 may allow a user to enter desired cooking conditions (cooking method, cooking parameters) per food preparation chamber and may provide the user with feedback. EX1012, 7:29-32. A POSITA viewing FIG. 1 would understand that the user interface of FIG. 1 could be applied to each compartment disclosed in FIG. 6 and thus the cooking operations are programmable. A POSITA would recognize that cooking using a programmable interface would simultaneously cook food in an independent operation of the heating elements.

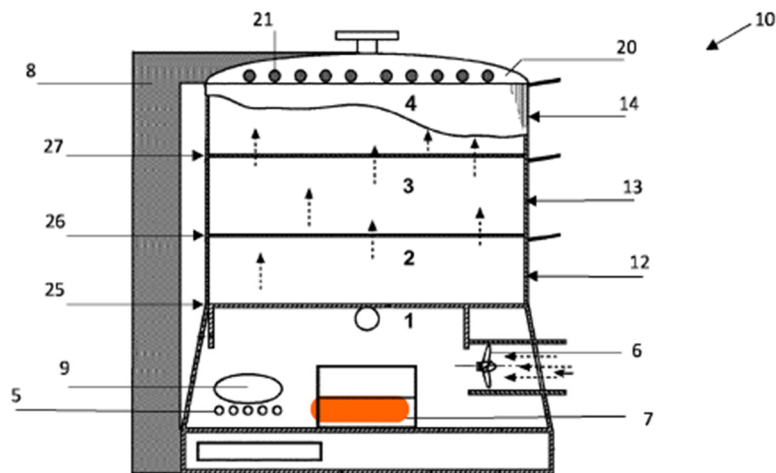


FIG. 1

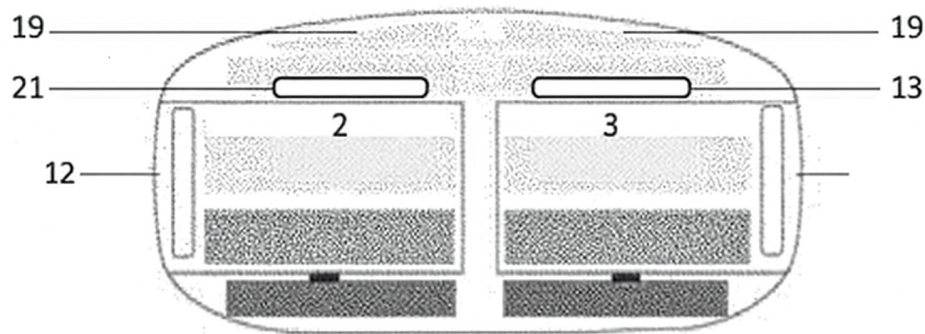


FIG. 6

194. As shown above in annotated Fig. 6 of Philips, a user interface could be placed above each compartments 2 and 3 allowing for user programming. Other locations on device represented by Philips Fig 6 could be used also and well within the level of ordinary skill in the art.

195. To the extent the user interface of Philips is not programmable, Philips in view of Moon renders this limitation obvious. Moon discloses a user interface that comprises “programmable time and temperature buttons, as well as a plurality of preset time and temperature settings and a plurality of programmable buttons.” EX1013, [0011].

196. It is my opinion that a POSITA would have been motivated to combine a programmable user interface with a dual-chamber air fryer, such as the Philips design, in order to improve the operability and flexibility of the appliance. Dual air

fryers inherently require coordination of time and temperature settings for two independent cooking compartments as disclosed in Philips. It is my opinion that a POSITA would recognize that incorporating a programmable interface allows the operator to manage each compartment separately or in synchronization, thereby reducing user burden and minimizing error compared to manual adjustment.

197. It is my opinion that a POSITA would also have had a reasonable expectation of success in making this combination. Both the hardware (programmable displays, digital controllers) and software (preset storage, compartment-specific controls) were readily available and routinely implemented in consumer cooking devices by the relevant timeframe. *See e.g.*, EX1013, EX1016(“computer motherboard” and “operation button”). Integrating these known control elements into a dual-compartment air fryer would not have required inventive skill but merely routine adaptation of existing design practices.

198. Accordingly, it is my opinion that Philips alone, or alternatively, Philips in view of Moon, renders claim limitation 11[j] obvious.

***Claim 11[k]***

199. Philips discloses that “wherein the first and second cooking containers are substantially horizontally coplanar when disposed in the first and second internal cooking compartments respectively.” This is FIG. 6 of Philips. It is my opinion that

POSITA would understand that the arrangement proposed by Philips would be a substantially horizontally coplanar arrangement. EX1012, Fig. 6.

***Claim 11[l]***

200. Philips discloses “wherein the first and second cooking containers have respective first and second perforated bases.” As shown in Philips:

the food preparation chambers may share one or more components, such as for instance a heat source, a moisture source and/or an air flow generating source. This may contribute to an efficient, compact device. Suitable control means may be provided to control the supply of aforementioned sources to the individual food preparation chambers. For example, containers that accommodate the respective food preparation chambers may be provided with permeable bottom and/or side walls, wherein the permeability is preferably adjustable.

EX1012, 5:4-9; 6:21-22 (disclosing embodiments with permeable bottoms). A POSITA would understand a permeable bottom is a perforated base. For example, Philips explicitly refers to “non-perforated” portions when referring to non-permeable portions of partitions. EX1012, 9:30-33. A POSITA would understand that in an air fryer the perforations allow for the circulation of the air around the food.

201. Accordingly, Philips in view of Moon renders claim 11 obvious.

**J. Claim 12**

202. Claim 12 depends on claim 11 and therefore my above discussions of claim 11 are repeated and incorporated by reference to the extent it applies to claim 12.

203. *See* claim 7 discussed in Ground 3, the discussion of which applies equally and is incorporated by reference here. It is my opinion that Philips in view of Moon renders obvious claim 12.

**K. Claim 13**

204. Claim 13 depends on claim 11 and therefore my above discussions of claim 11 are repeated and incorporated by reference to the extent it applies to claim 13. It is my opinion that Philips in view of Moon discloses claim 13.

***Claim 13[a]***

205. It is my opinion that Philips discloses “wherein the first internal cooking compartment and the second internal cooking compartment are independently operable to cook food.” Philips states that dual arrangement of the air fryers allows two cooking operations at the same time (two food chambers can be set independently). EX1012, 11:12-15, Fig. 6. “The chambers are arranged side by side and are physically separated such that the cooking parameters in the food preparation chambers can be set independently.” EX1012, 11:12-13. Each food chamber has “its own heating element 21.”



FIG. 6

It is my opinion that a POSITA would recognize that two food preparation chambers that can be “set independently” establishes that each food preparation chamber has its own heating element that is independently operable to cook food.

***Claim 13[b]***

206. It is my opinion that Philips discloses “using at least one of conduction, convection, radiation, and induction.” Philips uses heating elements, which Philips discloses are for “supplying radiation heat.”. EX1012, 9:9-12. A POSITA would understand that the heating element of Philips discloses at least radiation. Moreover, the inclusion of the fan 19 in Philips indicates that the Philips reference, like Zhang discussed above in Ground 1, is convection a cooking method and in the same manner of the '026 Patent. *See* EX1001; 9:46-10:2.

**L. Claim 14**

207. Claim 14 depends on claim 11 and therefore my above discussions of claim 11 are repeated and incorporated by reference to the extent it applies to claim 14. It is my opinion that Philips in view of Moon discloses claim 14.

**Claim 14[a]**

208. Philips discloses “a control system configured to operate the first and second cooking assemblies,” Philips discloses a user interface 7 and processor may allow a user to enter desired cooking conditions (cooking method, cooking parameters) per food preparation chamber and may provide the user with feedback. EX1012, 7:18-32. A POSITA viewing FIG. 1 would understand that the user interface and processor of FIG. 1 could be applied to each compartment disclosed in FIG. 6 and thus the cooking operations are programmable. The device in Philips’ Fig. 6 is an electronic device, and the POSITA would understand that the user interface 7 and processor of Philips Fig. 1 could be included in the embodiment of Fig. 6 to operate the device according to Philips’ desired goal of two cooking operations. *See EX1012, 7:18-32.* It is my opinion that a POSITA would easily recognize that cooking using a programmable would simultaneously cook food in an independent operation of the heating elements.

209. To the extent Patent Owner takes the position that there must be a single control system that operates the first and *second* cooking assemblies, it is my opinion

that Philips discloses this as well. Philips discloses a user interface that controls multiple containers. After the user sets the parameters via the user interface, “the processor may then (sic) calculate which chamber needs to be operated when to have all dishes ready at the same time.” EX1012, 12:27-28. A POSITA would be motivated to combine Philips with Moon for the same reasons applied in Claim 11. Thus, a device is obtained with which several dishes can be prepared at the same time, automatically.” EX1012, 17-29.

***Claim 14[b]***

210. It is my opinion that Philips discloses and/or renders obvious “the control system being configured to receive inputs corresponding to at least one of a temperature, a cook time, and a food type,” Philips states that the user interface allows users to put in cooking parameters. EX1012, 12:20-21. Philips discloses a cooking parameter can include “temperature, cooking time, air flow rate, humidity, pressure.” EX1012, 4:6-7. A person of ordinary skill in the art (“POSITA”) would have been motivated to provide a single user interface to control both chambers of a dual-chamber air fryer in order to simplify operation, reduce component cost, and improve user experience. Dual-chamber air fryers for users may require coordination of temperature and timing settings for each chamber. Prior to the priority date, it was well known that user interfaces in consumer appliances (e.g., ovens) commonly controlled multiple heating or processing zones from a single integrated panel.

EX1017, 14 at 4:22-28 (“Such a double oven combination may be comprised of two ovens each of which is a unit configured identically to the oven 10 described hereinabove with one of these ovens being an upper oven disposed at a predetermined spacing above the other oven (the lower oven) and can include an associated single control panel for controlling the operation of both the upper and lower ovens.”). It is my opinion that a POSITA would have recognized that duplicating separate interfaces for each chamber would be unnecessarily complex and confusing to the user, while a single interface could readily allow independent or synchronized control of both chambers through selectable menus or inputs.

211. Moreover, integrating a single user interface aligns with established design practices to minimize parts, reduce manufacturing cost, and conserve space on the appliance housing. It would have been straightforward for a POSITA to adapt known programmable control elements (e.g., digital displays, keypads, or rotary selectors) to allow chamber-specific selection within a single panel. The use of a single interface to control multiple cooking compartments would thus represent the predictable application of known technology to achieve recognized benefits. *See* EX1017.

212. It is my opinion that a POSITA would have had a reasonable expectation of success in implementing such a configuration. At the time, single interfaces controlling multiple functions were common in household appliances, and both the

hardware and software required to enable chamber-specific control were readily available and routinely applied. *See, e.g.*, EX1017. Incorporating a single control panel to operate two cooking chambers would not have required inventive skill, but instead would have been a matter of routine design choice yielding predictable results.

213. As a result, it is my opinion that Philips modified to include a single user interface renders obvious claim 14.

**M. Claim 15**

214. Claim 15 depends on claim 11 and therefore my above discussions of claim 11 are repeated and incorporated by reference to the extent it applies to claim 15. It is my opinion that Philips in view of Moon discloses claim 15.

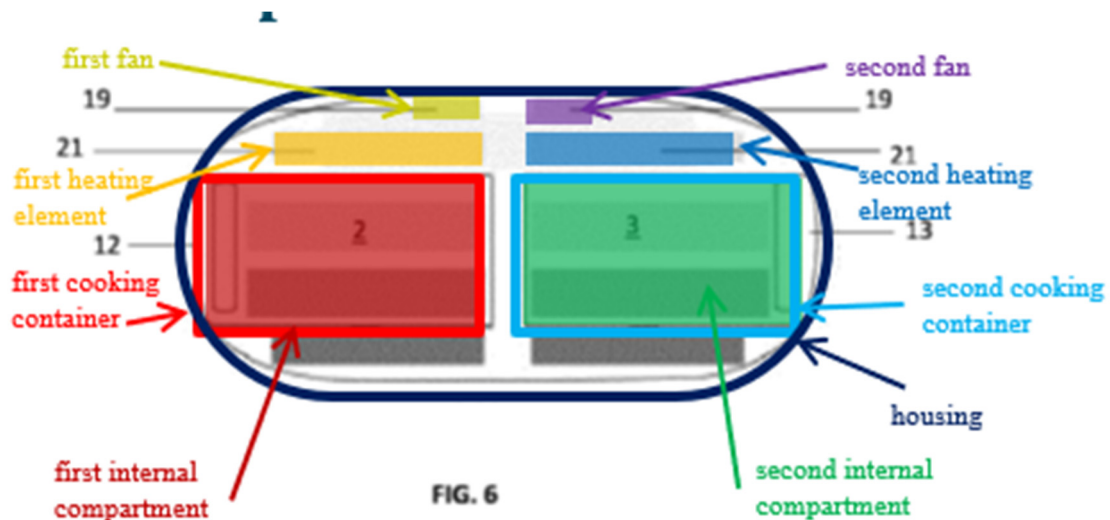
***Claim 15[a]***

215. Philips discloses and/or renders obvious “a motor operably coupled to each of the first and second fans.” Philips teaches the fan provides air flow which is evenly distributed over the food. EX1012, 11:15-21. It is my opinion that POSITA would understand that Philips reference to a “fan” includes a motor. Philips is an electronic air fryer. It is my opinion that a POSITA understands that these fans are coupled to motors which are controlled to allow air flow to occur. *See e.g.*, EX1015, [0005](“An air fryer, comprising ... blade motor, ... hot-air blade”).

216. To the extent the Philips reference does not expressly disclose a motor, a person of ordinary skill in the art (“POSITA”) would have understood that a motor is inherently included. The Philips reference describes a fan for circulating hot air within the cooking chamber. EX1012, 11:15-21. A POSITA would know that such a fan cannot operate without a motor to drive it.

217. At the time of the invention, it was well established in the field of cooking appliances that air fryers and convection ovens rely on forced air circulation. Heating elements generate hot air, and a motor-driven fan distributes that air evenly throughout the cooking volume. Thus, to the extent not expressly disclosed, the motor is inherently present in the Philips device, because the described functionality cannot occur without it. Here, the operation of the fan to circulate heated air necessarily requires a motor.

218. Accordingly, a POSITA would have understood that a motor is included in Philips, and to the extent not expressly disclosed, the motor is inherently disclosed by Philips because it is required to achieve the described operation. It is thus my opinion that a POSITA understands that the motor would be coupled to the fan to circulate air. EX1012, Fig. 6 (annotated).



***Claim 15[b]***

219. Philips and/or Philips in view of Moon discloses “the motor configured to operate the first and second fans at the same speed or at different speeds.” Philips does not explicitly disclose speeds for air circulation. Philips instead states “Alternatively, the chambers 2, 3 may each include their own heating element 21 and share a single fan 19. In such case, suitable control means may be provided to control the air flow rate of said fan to the respective chambers 2, 3.” EX1012, 11:15-18. It is my opinion that a POSITA would understand that the “suitable control means” disclosed in Philips single fan embodiment could be applied to the multiple fan embodiments to implement multiple fan speeds.

220. To the extent Petitioner asserts Philips does not disclose a motor configured to operate the first and second fans at the same speed or at different

speeds, Moon discloses for its fans that a user may set “air speed” via a user interface. EX1013, [0034]. It is my opinion that a POSITA would have been motivated to adapt the motor control functionality of Moon into the Philips dual-chamber system using a single motor with a gearbox mechanism to drive both fans. Gearboxes and transmission systems were well-known in the art to split torque and adjust rotational speeds across multiple outputs from a single motor. *See* EX1014, ¶[00305]. By coupling a gearbox to the motor shaft, a POSITA would readily recognize that two driven shafts could be configured: (1) to rotate both fans at the same speed, or (2) to rotate the fans at different speeds, depending on gear ratios or clutching mechanisms. The ‘026 Patent is notably silent on how multiple speeds for a single motor is achieved.

221. The motivation to employ a single motor with a gearbox rather than two separate motors is supported by several factors. First, it reduces cost and complexity by eliminating duplicate motors and associated wiring. Second, it conserves space within the appliance housing—an important consideration in compact countertop devices such as a tabletop air fryer. Third, it ensures synchronized operation when desired, while still enabling differential speeds through selectable gearing, thereby providing flexibility to accommodate different food items in the two chambers.

222. This modification would have been routine for a POSITA because single-motor, multi-output gearbox systems were already in common use in

household appliances (e.g., washing machines, mixers, HVAC blowers) where a single motor drives multiple fans, drums, or impellers at different or selectable speeds. The application of such known mechanical arrangements to the Philips dual-fan configuration would have been a predictable use of known elements to yield expected benefits.

223. It is my opinion that a POSITA would also have had a reasonable expectation of success, since both Philips and Moon already disclose electric fans driven by motors, and gearboxes are mature, off-the-shelf components that can readily distribute motion from a single motor to multiple outputs. The combination would not require inventive skill but instead reflect routine engineering design, producing the predictable improvement of enabling one motor to operate both fans at the same or different speeds depending on cooking needs.

224. Thus, it is my opinion that Philips in view of Moon renders obvious Claim 15.

**N. Claim 16**

***Claim 16[pre]***

225. My discussion above addressing claim 1[pre] applies to claim 16[pre] and is repeated and incorporated by reference here.

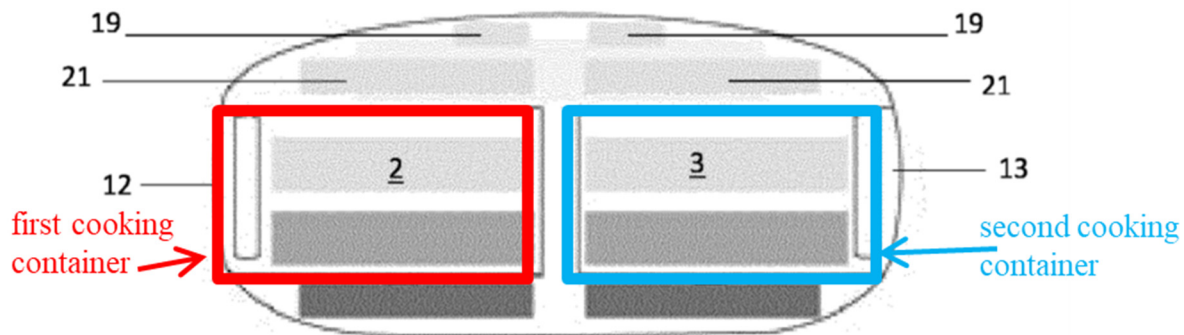
***Claim 16[a]***

226. My discussion above addressing claim 1[a] applies to claim 16[a] and is repeated and incorporated by reference here.

***Claim 16[b]***

227. See claim limitations 1[b], 1[c], 1[d], and 1[e] for Ground 3 which establish that Philips discloses “having first and second internal independently removable cooking containers disposed therein.” My discussion of limitations 1[b], 1[c], 1[d], and 1[e] for Ground 3 is repeated and incorporated by reference here.

228. Philips states that “each food preparation chamber may be accommodated in a container 12, 13 which may for instance be **removably** mounted in a support structure 8 *for instance like a drawer*. EX1012, 11:19-23; Figure 2 (annotated)



229. It is my opinion that POSITA would recognize that the first and second container of Philips when closing off like a “drawer” meets the limitation of closing off an opening of the first compartment when inserted. As disclosed in the other

embodiments of Philips which are also described as “drawers” it is clear that the containers when inserted close off openings shown above platforms 22, 23 and 24. A POSITA would further understand that these drawers are independently removable. EX1012, Claim 8 (each container is removably arranged).

***Claim 16[c]***

230. See claim 1[b], for Ground 3 which establishes that Philips discloses a first cooking container defining a first volume, and claim 1[c] which establishes that Philips discloses a second cooking container defining a second volume. My discussion of limitations 1[b] and 1[c] for Ground 3 is repeated and incorporated by reference here.

***Claim 16[d]***

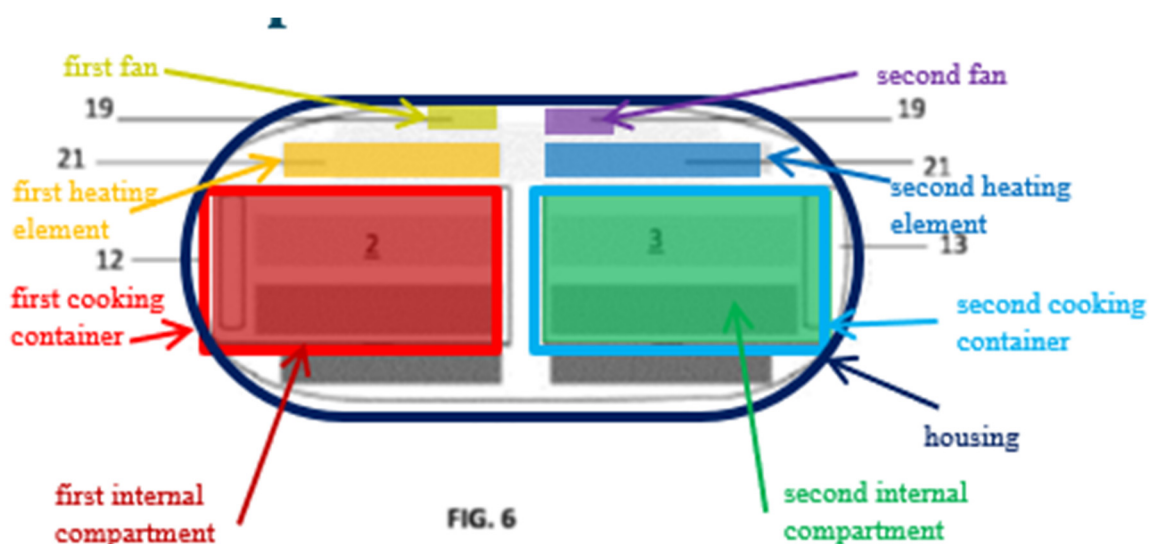
231. It is my opinion that Philips discloses “the first and second cooking containers being configured to engage with first and second respective channels inside the housing to define first and second respective air ducts therein.” Each of the containers 12 and 13 are placed within food preparation chambers 2, 3. EX1012, 11:23-25. Each chamber includes “air guide elements” which a POSITA would recognize as an air duct. EX1012, 11:19-22. It is my opinion that a POSITA would further understand that the placement of the containers 12 and 13 allow the air guide elements to define the first and second respective air ducts.

***Claim 16[e]***

232. It is my opinion that Philips discloses “the first and second cooking containers forming a continuous outer surface with the housing when the first and second cooking containers are disposed in the housing.” My discussion of limitation 1[f] for Ground 3 above is incorporated by reference and repeated here.

***Claim 16[f]***

233. It is my opinion that Philips discloses “first and second heating elements disposed in the housing adjacent the cooking volume of the first and second cooking containers, respectively.” This is shown in Fig. 6 of Philips. EX1012, Fig. 6 (annotated below). It is my opinion that a POSITA would understand that the arrangement proposed by Philips would be adjacent to the cooking volume of the first and second cooking containers of Philips, which is the respective first and second internal compartments identified below.

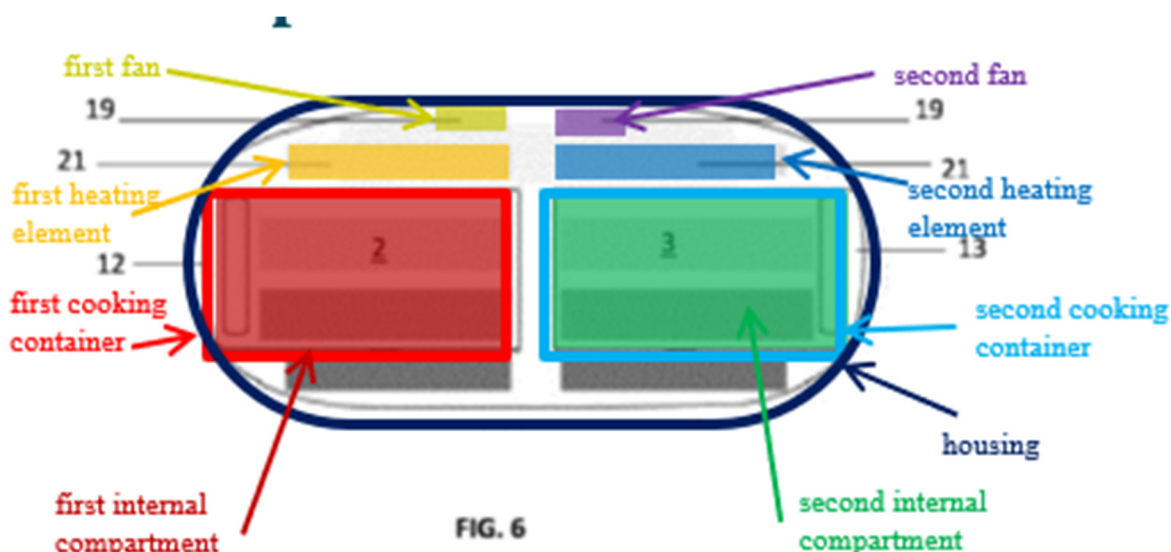


***Claim 16[g]***

234. It is my opinion that Philips discloses “the first and second heating elements being independently operable.” My discussion of limitation 1[j] for Ground 3 above is incorporated by reference and repeated here. It is my opinion POSITA would understand that the heating elements can be independently operable.

***Claim 16[h]***

235. It is my opinion that Philips discloses “first and second fans disposed in the housing adjacent the first and second heating elements, respectively.” Philips describes the fan 19 and heating element 21 for each cooking chamber situated above each chamber and discloses the fan and heating elements stacked vertically, which are disposed in the housing adjacent to each other. EX1012, 11:14-17; Fig. 6 (annotated). Thus, it is my opinion that Philips discloses this limitation.



***Claim 16[i]***

236. It is my opinion that Philips discloses “the first and second fans being independently operable.” Philips states that the food preparation chambers can be set independently. EX1012, 11:11-14. Moreover, Philips describes that the air flow rate can be controlled independently per food preparation chamber. EX1012, Claim 7. It is my opinion that a POSITA would understand that the fans located adjacent to each food preparation chamber can be independently operable which allows and facilitates the chambers to set independently.

***Claim 16[j]***

237. It is my opinion that Philips discloses “the first and second fans being configured to circulate air through the first and second cooking volumes, respectively.” Philips discloses that each chamber includes a fan (EX1012, 11:13-15), and that each chamber includes air guide elements to “guide the air circulation according to a predetermined pattern, wherein preferably the air flow is evenly distributed through the food.” EX1012, 11:19-22. Philips further discloses that the air is returned via a periphery of the food chambers 2 and 3. EX1012, 11:22. Air fryers use circulation for cooking food. EX1010, ¶[0002]. It is my opinion that a POSITA would understand that the fans provide the air to the air guide elements to allow the air to move around within the cooking volumes.

238. Accordingly, it is my opinion that Philips in view of Moon renders obvious and invalidates claim 16.

**O. Claim 17**

239. Claim 17 depends on claim 16 and therefore my above discussions of claim 16 are repeated and incorporated by reference to the extent it applies to claim 17. It is my opinion that Philips in view of Moon discloses claim 16.

240. Claim 17 is similar to claim 14 and thus the discussion of claim 14 in Ground 3 is incorporated by reference and applies equally here.

241. Philips discloses claim 17, which depends on claim 16, and recites “a control system configured to operate cooking processes of food contained in the first and second cooking containers.” Philips discloses a user interface 7 and processor may allow a user to enter desired cooking conditions (cooking method, cooking parameters) per food preparation chamber and may provide the user with feedback. EX1012, 7:18-32. A POSITA viewing FIG. 1 would understand that the user interface and processor of FIG. 1 could be applied to each compartment disclosed in FIG. 6 and thus the cooking operations are programmable. The device in Philips’ Fig. 6 is an electronic device, and the POSITA would understand that the user interface 7 and processor of Philips Fig. 1 could be included in the embodiment of Fig. 6 to operate the device according to Philips’ desired goal of two cooking operations. *See* EX1012, 7:18-32. A POSITA would easily recognize that cooking

using a programmable interface would simultaneously cook food in an independent operation of the heating elements.

242. To the extent Patent Owner takes the position that there must be a single control system that operates the first and *second* cooking assemblies, it is my opinion that Philips discloses this as well. Philips discloses a user interface that controls multiple containers. After the user sets the parameters via the user interface, “the processor may than (sic) calculate which chamber needs to be operated when to have all dishes ready at the same time.” EX1012, 12:27-28. A POSITA would be motivated to combine Philips with Moon for the same reasons applied in Claim 11. Thus a device is obtained with which several dishes can be prepared at the same time, automatically.” EX1012, 17-29.

**P. Claim 18**

243. Claim 18 depends on claim 17 and therefore my above discussions of claim 17 are repeated and incorporated by reference to the extent it applies to claim 18. It is my opinion that Philips in view of Moon discloses claim 18.

***Claim 18[a]***

244. It is my opinion that Philips discloses “wherein the control system is configured to independently operate the first and second heating elements.” As explained in Claims 14 and 17, above, the user interface of Philips can be utilized to set one or more cooking parameters. EX1012, 12:21-21. Philips further states that

the processor is designed so that the system can prepare “several dishes” at the same time, automatically. EX1012, 12: 18-3; Claim 7 (cooking parameters can be set and controlled independently including temperature). It is my opinion that POSITA would recognize that in order to operate the air fryer with two cooking chambers, the control system would operate the heating element independently.

***Claim 18[b]***

245. Philips discloses “wherein the control system is configured to independently operate ... the first and second fans.” As stated in Claim 7, Philips discloses that the air flow rate of each chamber “can be set and controlled independently.” EX1012, Claim 7. Philips further states that the chambers in a side-by-side arrangement are separated such that cooking parameters (such as air flow from the fans) can be set independently. EX1012, 11:11-15. It is my opinion that a POSITA would recognize that the user interface of Philips along with the processor of Philips comprises a control system configured to independently operate the first and second fans.

**Q. Claim 19**

246. Claim 19 depends on claim 17 and therefore my above discussions of claim 17 are repeated and incorporated by reference to the extent it applies to claim 19. It is my opinion that Philips in view of Moon discloses claim 19.

247. Philips discloses “the control system is configured to receive inputs corresponding to at least one of a temperature, a cook time, and a food type.” EX1012, Claim 7; EX1012, 12:24-26 (set cooking parameters such as “temperature and time”). Philips discloses that the user interface allows users to set parameters, such as temperature and time. *See* EX1012, 4:4-7, 7:19-34.

**R. Claim 20**

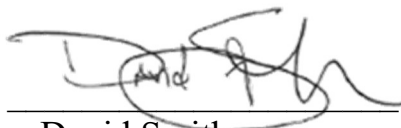
248. Claim 20 depends on claim 17 and therefore my above discussions of claim 17 are repeated and incorporated by reference to the extent it applies to claim 20. It is my opinion that Philips in view of Moon discloses claim 20.

249. Philips discloses that the control system is configured to adjust cooking parameters based on sensed data without user input. Philips discloses a processor which “automatically” may set cooking parameters, such as temperature and time using calculations. EX1012, 12:25-27. Further, Philips discloses that the device can automatically prepare several dishes at the same time “without further user input and/or coordination needed to have the dishes ready at the same time.” It is my opinion that a POSITA would recognize the processor’s calculations to allow multiple dishes to be ready at the same time without further user input is based on sensed data, such as food type to allow the processor to implement cooking to allow multiple food chambers to finish cooking food in each respective chambers at the same time. EX1012, 12:16:31.

XI. CONCLUSION

250. I currently hold the opinions expressed in this Declaration. I reserve the right to supplement these opinions, however, in the event that I become aware of additional pertinent information or in response to the testimony of others, including any experts offered by Patent Owner. I declare that all statements made herein of my knowledge are true, and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Date: 12 September 2025

By:   
David Smith