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(54) **RANGE HOOD ASSEMBLY AND INTEGRATED COOKER**

(57) The present disclosure provides a range hood assembly (100) and an integrated cooker (200), and relates to the field of range hoods. The range hood assembly (100) comprises: a volute (110), wherein the end face of the volute comprises an opening (1102); a buckling part (120), arranged on the end face of the volute (110) and located on the first side of the opening (1102); a bottom plate (130) covering the opening, wherein the bottom plate comprises a first side edge (1302) and a through hole (1304), the buckling part (120) is buckled to the first side edge (1302), and the through hole (1304) avoids the first side edge (1302) in the circumferential direction of the bottom plate (130); and a connecting piece (140) penetrating through the through hole (1304) and connected to the volute (110).

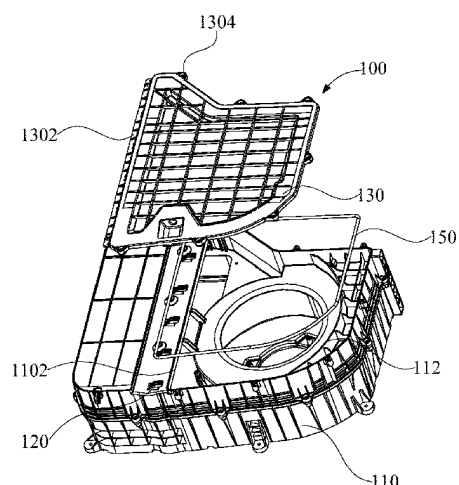


FIG. 1



EUROPEAN SEARCH REPORT

Application Number

EP 24 16 6655

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DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	CN 2 769 721 Y (MEIDI FAMILY APPLIANCES FOR DA [CN]) 5 April 2006 (2006-04-05)	1-4,7,15	INV. F24C15/20 F04D29/42
Y	* figures 2,3,5 *	5,6	
Y	DE 10 2015 213470 A1 (BRUCKBAUER WILHELM [DE]) 19 January 2017 (2017-01-19) * figure 2 *	5,6	
A	CN 102 478 271 B (BSH ELEC APPLIANCES JIANGSU CO) 9 March 2016 (2016-03-09) * figures 2-3 *	1-7,15	
A	CN 203 978 897 U (GUANGDONG HISENSE HOME APPLIANCES CO LTD) 3 December 2014 (2014-12-03) * figures 7-8 *	1-7,15	
A	CN 210 219 932 U (FOSHAN YUNMI ELECTRICAL APPLIANCE SCIENCE & TECHNOLOGY CO LTD ET AL.) 31 March 2020 (2020-03-31) * figures 1-6 *	1-7,15	TECHNICAL FIELDS SEARCHED (IPC) F24C F04D
A	CN 112 797 465 A (MARSSSENGER KITCHENWARE CO LTD) 14 May 2021 (2021-05-14) * figures 1-2 *	1-7,15	
A	CN 210 317 906 U (GREE ELECTRIC APPLIANCES INC ZHUHAI) 14 April 2020 (2020-04-14) * figures 1-3 *	1-7,15	
The present search report has been drawn up for all claims			

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EPO FORM 1503 03:82 (F04C01)

Place of search	Date of completion of the search	Examiner
The Hague	2 July 2024	Adant, Vincent
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document		



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1 - 7, 15

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-7, 15

Range hood with a volute comprising a buckling part for
fixing a bottom plate

2. claims: 8, 9

Range hood with a sealing ring at the volute bottom plate

3. claims: 10-14

Range hood with a volute comprising a drain hole

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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02 - 07 - 2024

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	CN 2769721 Y	05-04-2006	NONE	
15	DE 102015213470 A1	19-01-2017	NONE	
	CN 102478271 B	09-03-2016	NONE	
	CN 203978897 U	03-12-2014	NONE	
20	CN 210219932 U	31-03-2020	NONE	
	CN 112797465 A	14-05-2021	NONE	
25	CN 210317906 U	14-04-2020	NONE	
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82