



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
19.04.2023 Bulletin 2023/16

(51) International Patent Classification (IPC):
A24F 40/50 ^(2020.01) **A24F 40/53** ^(2020.01)
A24F 40/60 ^(2020.01)

(43) Date of publication A2:
12.04.2023 Bulletin 2023/15

(52) Cooperative Patent Classification (CPC):
A24F 40/50; A24F 40/53; A24F 40/42; A24F 40/60

(21) Application number: **22200531.6**

(22) Date of filing: **10.10.2022**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(72) Inventors:
• **ZHOU, Liangde**
Laocheng Town, Chengmai County (CN)
• **YANG, Jingjing**
Laocheng Town, Chengmai County (CN)
• **ZHOU, Yaoguo**
Laocheng Town, Chengmai County (CN)
• **YANG, Jiyong**
Laocheng Town, Chengmai County (CN)

(30) Priority: **11.10.2021 CN 202111183815**

(71) Applicant: **Hainan Moore Brothers Technology Co., Ltd.**
Hainan (CN)

(74) Representative: **De Arpe Tejero, Manuel**
Arpe Patentes y Marcas
Alcalá, 26, 5ª Planta
28014 Madrid (ES)

(54) **POWER SUPPLY ASSEMBLY WITH A LINEAR MOTOR FOR AN ELECTRONIC ATOMIZATION DEVICE**

(57) A power supply assembly (1) and an electronic atomization device (100) are provided. The power supply assembly (1) is applied to an electronic atomization device (100) including an atomizer (2). The power supply assembly (1) includes a control circuit (10) and a linear motor (20). The linear motor (20) is connected to the control circuit (10). The control circuit (10) is configured to control the linear motor (20) to vibrate in a corresponding

vibration mode according to a usage state of the electronic atomization device (100). Thus, the power supply assembly (1) and the electronic atomization device (100) provided by the embodiments of the present disclosure have good interaction experience and a plurality of vibration modes, thereby improving the feedback experience of a user.

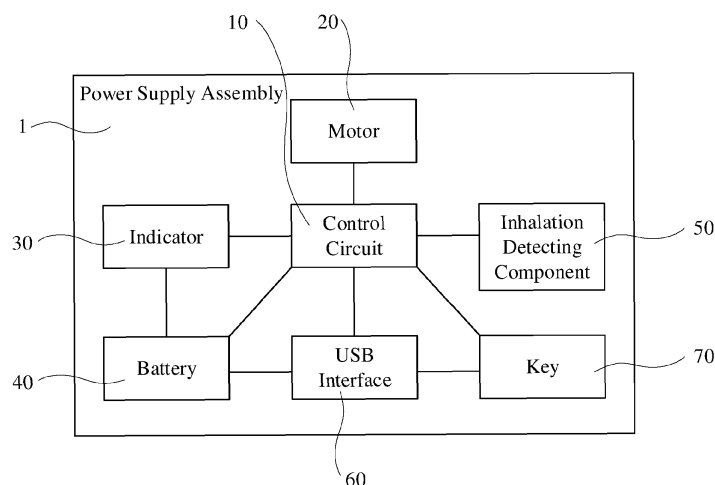


FIG. 2



EUROPEAN SEARCH REPORT

Application Number

EP 22 20 0531

5

10

15

20

25

30

35

40

45

50

55

2

EPO FORM 1503 03:82 (P04C01)

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	EP 3 817 608 A1 (PHILIP MORRIS PRODUCTS SA) 12 May 2021 (2021-05-12)	1-3, 5-15	INV.
Y	* figures 1-5 *	4	A24F40/50
	* paragraphs [0067] - [0071] *		A24F40/53
	-----		A24F40/60
X	WO 2017/201221 A1 (GSW CREATIVE CORPORATION) 23 November 2017 (2017-11-23)	1, 14, 15	
	* figures 5, 6 *		
	* paragraphs [0037] - [0040] *		

X	WO 2019/239217 A1 (NEXVAP SA) 19 December 2019 (2019-12-19)	1, 14, 15	
	* figures 1, 9, 24 *		
	* paragraphs [0107] - [0109] *		

X	US 2020/404976 A1 (CHEN ET AL.) 31 December 2020 (2020-12-31)	1, 14, 15	
	* figures 1, 11, 12, 13 *		
	* paragraphs [0052], [0056], [0059], [0066], [0082] - [0092], [0137], [0139], [0146] *		

Y	US 2017/119052 A1 (WILLIAMS ET AL.) 4 May 2017 (2017-05-04)	4	A24F
A	* figures 2, 4, 7 *	1-3, 5-15	G08B
	* paragraphs [0096] - [0098] *		

The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		2 March 2023	Mier Abascal, Ana
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention	
X : particularly relevant if taken alone		E : earlier patent document, but published on, or after the filing date	
Y : particularly relevant if combined with another document of the same category		D : document cited in the application	
A : technological background		L : document cited for other reasons	
O : non-written disclosure		
P : intermediate document		& : member of the same patent family, corresponding document	

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

EP 22 20 0531

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

02-03-2023

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 3817608 A1	12-05-2021	BR 112020025493 A2	09-03-2021
		CN 112384089 A	19-02-2021
		EP 3817608 A1	12-05-2021
		IL 278837 A	31-01-2021
		JP 7189237 B2	13-12-2022
		JP 2021528962 A	28-10-2021
		KR 20210013598 A	04-02-2021
		PH 12020552015 A1	14-06-2021
		PL 3817608 T3	27-06-2022
		RU 2753566 C1	17-08-2021
		US 2021282465 A1	16-09-2021
		WO 2020008028 A1	09-01-2020
<hr/>			
WO 2017201221 A1	23-11-2017	AR 108507 A1	29-08-2018
		AU 2017203333 A1	07-12-2017
		AU 2019200679 A1	21-02-2019
		BR 112018073751 A2	26-02-2019
		CA 2967745 A1	18-11-2017
		CL 2018003287 A1	21-06-2019
		EA 201892597 A1	30-04-2019
		EP 3458134 A1	27-03-2019
		ES 2910107 T3	11-05-2022
		GB 2566177 A	06-03-2019
		NZ 748604 A	29-05-2020
		US 2017332701 A1	23-11-2017
		WO 2017201221 A1	23-11-2017
<hr/>			
WO 2019239217 A1	19-12-2019	US 2021260312 A1	26-08-2021
		WO 2019239217 A1	19-12-2019
<hr/>			
US 2020404976 A1	31-12-2020	CN 110226777 A	13-09-2019
		EP 3756488 A1	30-12-2020
		US 2020404976 A1	31-12-2020
<hr/>			
US 2017119052 A1	04-05-2017	CN 108366628 A	03-08-2018
		EP 3367826 A2	05-09-2018
		HK 1252206 A1	24-05-2019
		RU 2018116856 A	02-12-2019
		US 2017119052 A1	04-05-2017
		WO 2017072705 A2	04-05-2017
<hr/>			