

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
20.03.2019 Bulletin 2019/12

(51) Int Cl.:
B05C 17/005 (2006.01)

(43) Date of publication A2:
12.12.2018 Bulletin 2018/50

(21) Application number: **18176705.4**

(22) Date of filing: **08.06.2018**

(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 MK MT NL NO
 PL PT RO RS SE SI SK SM TR**
 Designated Extension States:
BA ME
 Designated Validation States:
KH MA MD TN

(30) Priority: **08.06.2017 CN 201720666043 U**

(71) Applicant: **Hangzhou Kelong Electrical Appliance
 Tools Co. Ltd**
Jiande, Zhejiang 311604 (CN)

(72) Inventors:

- **Chen, Jian**
Jiande City, Zhejiang 311604 (CN)
- **Cui, Yuqun**
Jiande City, Zhejiang 311604 (CN)

(74) Representative: **2s-ip Schramm Schneider
Bertagnoll
Patent- und Rechtsanwälte Part mbB
Postfach 86 02 67
81629 München (DE)**

(54) **RAPID HEATING TIP FOR A HOT-MELT GLUE GUN AND A HOT-MELT GLUE GUN**

(57) The present disclosure relates to the field of electric power tools, and more particularly relates to a rapid heating tip for a hot-melt glue gun and a hot-melt glue gun. The rapid heating gun tip for a hot-melt glue gun comprises a glue loading sleeve (3) and a glue jetting nozzle (2), a transition tube (1) being formed between the glue jetting nozzle and the glue loading sleeve; wherein the rapid heating gun tip for a hot-melt glue gun further comprises an electrode sheet (6) and a plurality of heating bodies (4), the electrode sheets tightly press-fitting the heating bodies against outer sides of the heat conduction planes. The present disclosure addresses the issues of low heat conduction efficiency and long heating time.

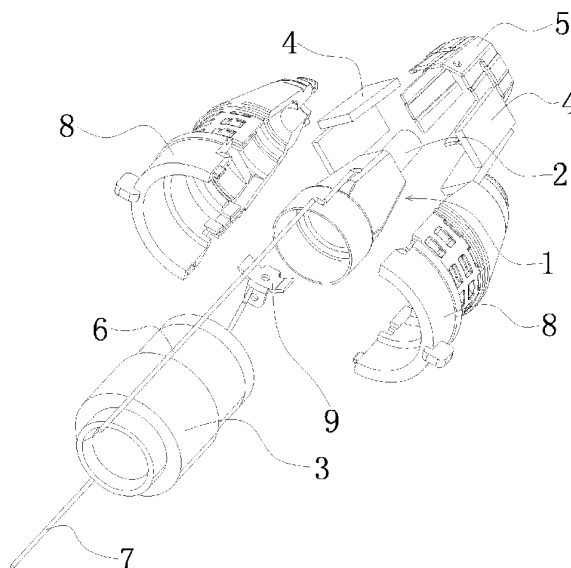


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 18 17 6705

5

10

15

20

25

30

35

40

45

50

55

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	US 6 142 207 A (RICHARDOT FRANCIS [FR]) 7 November 2000 (2000-11-07) * column 3, line 35 - line 55 * * figures 1-5 * -----	1-5,10	INV. B05C17/005
			TECHNICAL FIELDS SEARCHED (IPC)
			B05C
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 28 September 2018	Examiner Roldán Abalos, Jaime
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			

 1
EPO FORM 1503 03/82 (P04C01)



Application Number

EP 18 17 6705

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:

1-5, 10

☐ 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
EP 18 17 6705

5

10

15

20

25

30

35

40

45

50

55

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: 1-5, 10

Rapid heating gun tip with connecting sheet

2. claims: 6-9

Rapid heating gun tip with cutter

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

EP 18 17 6705

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.

28-09-2018

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6142207 A	07-11-2000	DE 69805456 T2	31-10-2002
		EP 0860212 A1	26-08-1998
		FR 2759925 A1	28-08-1998
		US 6142207 A	07-11-2000
