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11 May 2018 (11.05.2018)

(54) Title: SYSTEM FOR PROVIDING ENDOdontIC MATERIAL USING INDUCTION HEATING

(57) Abstract: A system for providing endodontic material includes an application device and a docking station for the application device. The application device includes a cartridge having a chamber structure containing endodontic material, with the chamber structure capable of being heated by magnetic induction. The application device also includes a handle assembly configured to hold the cartridge. The docking station includes a slot configured to contain the application device with a part of the application device positioned in the slot. The docking station is provided with an induction heating coil positioned adjacent to the slot, with the induction heating slot being configured to heat the cartridge of the application device.
### INTERNATIONAL SEARCH REPORT

**PCT/US2017/050974**

**A. CLASSIFICATION OF SUBJECT MATTER**

INV. A61C5/62  A61C5/66  A61C5/55

**ADD.**

According to International Patent Classification (IPC) into both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

A61C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:

- **A** document defining the general state of the art which is not considered to be of particular relevance
- **E** earlier application or patent but published on or after the international filing date
- **L** document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- **O** document referring to an oral disclosure, use, exhibition or other means
- **P** document published prior to the international filing date but later than the priority date claimed

**Date of the actual completion of the international search**

14 March 2018

**Date of mailing of the international search report**

06/04/2018

Name and mailing address of the ISA:

European Patent Office, P.B. 5818 Patentlaan 2

NL - 2280 HV Rijswijk

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Authorized officer

Salvatore, Claudio
INTERNATIONAL SEARCH REPORT

Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. □ Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. □ Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. □ Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III  Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. [ ] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. [ ] No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

[ ] The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

[ ] The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

[ ] No protest accompanied the payment of additional search fees.
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10

A system for providing endodontic material, the system comprising: an application device comprising: a cartridge including a chamber structure containing endodontic material, with the chamber structure capable of being heated by magnetic induction; a handle assembly configured to hold the cartridge; and a docking station including a slot configured to contain the application device with a part of the application device positioned in the slot, the docking station being provided with at least one induction heating coil positioned adjacent to the slot.

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2. claims: 11-20

A cartridge comprising: a chamber structure configured to contain endodontic material; and an outer sleeve configured to surround at least part of the chamber structure, the outer sleeve including a slot extending through the sleeve that allows a portion of the chamber structure to be viewed through outer sleeve.

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<td>US 3 917 062 A (WINTERS ROBERT) 4 November 1975 (1975-11-04)</td>
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