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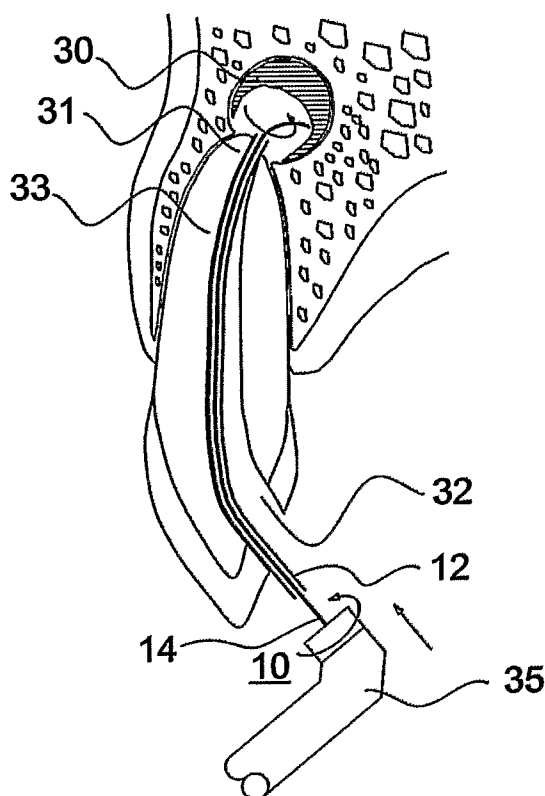
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[Continued on next page]

(54) Title: ABLATING APPARATUS PARTICULARLY USEFUL FOR REMOVAL OF DENTAL PERIAPICAL LESIONS



(57) Abstract: Apparatus for removing a dental periapical lesion at an apex of a root canal in a tooth, includes: an ablation device sized and constructed for (a) introduction through a cavity in the tooth into the root canal; (b) movement therethrough to protrude through the apex into contact with the dental periapical lesion; and (c) rotation while in contact with the dental periapical lesion in order to remove same by ablation. In some described embodiments, the ablation device includes a sleeve and a filament moveable therein to define a protruding curved end to be brought into contact with the dental periapical lesion for ablation thereof by rotation of the filament. In another described embodiment, the ablation device includes a sleeve and a filament within the sleeve and secured at one end to one end of the sleeve, the sleeve being formed with a plurality of slits such that, displacing the sleeve towards its secured end, produces outwardly-bowed surfaces along the slits effective to ablate the dental periapical lesion tissues upon rotation of the sleeve.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IL2006/001329

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61C3/02 A61C5/02 A61B17/32

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61C A61B

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 practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CH 467 061 A (KAHN HENRY [US]) 15 January 1969 (1969-01-15)	1
Y	the whole document	2-6, 8-10,13
Y	WO 00/45716 A (SHIBER SAMUEL [US]) 10 August 2000 (2000-08-10) pages 3,5; figure 1	2-6, 8-10,13



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 document 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

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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

7 March 2007

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INTERNATIONAL SEARCH REPORT

International application No.
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Box 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 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 fee, this Authority did not invite payment of any additional fee.
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.:

1-14

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-14

Apparatus for removing a periapical lesion comprising a sleeve and a filament having a curving protruding

2. claims: 15-20

Apparatus for removing a periapical lesion comprising a sleeve being formed with slits and a filament having a distal end secured to the distal end of the sleeve

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IL2006/001329

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
CH 467061	A	15-01-1969	NONE	
WO 0045716	A	10-08-2000	AU 2858800 A	25-08-2000
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