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(71) Applicant and

(72) Inventor: **BROCK, Mathew** [US/US]; 1403 Patten Road,
Lookout Mountain, GA 30750 (US).

(74) Agent: **BARNEY, Jonathan, A.**; Law Offices Jonathan
Barney, 312 Signal Road, Newport Beach, CA 92663 (US).

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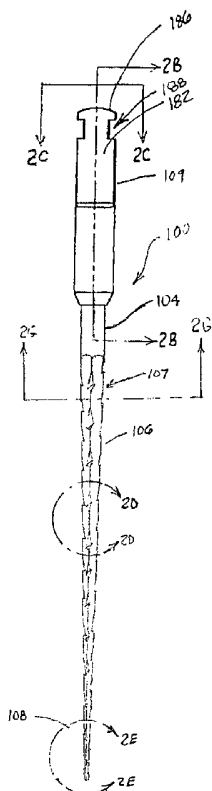
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(54) Title: ENDODONTIC INSTRUMENT HAVING NOTCHED CUTTING SURFACES

(57) Abstract: A fluteless endodontic file (100) is provided, formed from a tapered shaft (110) of material having a prismatic shape generally defined by three or more side surfaces (126) and three or more interposed corners (124). A plurality of notches (118) are cut into one or more corners (124) defining cutting surfaces, points and/or edges (120, 128, 130). The notched cutting surfaces are formed such that the file, when rotated and/or reciprocated within a root canal (58), effectively cuts/debrides hard tissue (known in the art as dentin) as well as soft tissue, thus, forming an optimal canal shape. The cutting surfaces are also preferably formed at an angle to the centerline of the instrument to provide optimal cutting efficiency and material removal. The fluteless file design exhibits increased efficacy, with less tendency to bind and break within the root canal and also significantly reduces manufacturing and capital equipment costs.



WO 03/015652 A3



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.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A 61 C 5/02

US CL : 433/102

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)

U.S. : 433/102

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,842,862 A (NISSAN) 01 December 1998, see entire document.	1,2,4-7,9,10,13,14,20

Y		3,8,15-19
Y	US 5,746,597 A (MAILLEFER ET AL) 05 May 1998, see entire document.	3
Y	US 5,380,200 A (HEATH ET AL) 10 January 1995, see column 4, lines 2-7.	8
A	US 6,267,592 B1 (MAYS) 31 July 2001, see entire document.	1-20
A	US 5,236,357 A (RANDIN) 17 August 1993, see entire document.	1-20
A	EP 0120542 A (FLUCKIGER) 03 October 1984, see entire document.	1-20

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

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Box PCT
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Facsimile No. (703)305-3230

Authorized officer

Cary E. O'Connor

Telephone No. 703-308-0858

Diane Smith