

**1) Family number: 36077193** (US2007218423A)

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**Title:** DENTAL SYSTEM FOR ROOT AND ROOT TIP EXTRACTION

**Abstract:** A compact, easily transportable dental system to permit root and root tip extractions from human and animal patients including those who are unable to visit an oral surgeon or veterinarian at a traditional office. An extraction bur having a lifting ball is embedded within and stands upwardly from the root or root tip to be extracted. The extraction bur is detachably connected to and rotated into the root/tip by a bur implanting device. A bur ejector is slidable through the bur implanting device to cause the extraction bur to be released therefrom once the bur has been implanted in the patient's root/tip. A universal fulcrum tray covers the root/tip and surrounds the patient's adjacent teeth during the extraction process. The upstanding extraction bur and the lifting ball thereof project through one of a pair of slots formed in the universal fulcrum tray. An extracting instrument having a pivot surface rotates over the universal fulcrum tray to apply a lifting force to the lifting ball of the extraction bur to pull the bur upwardly and the root/tip outwardly from its root socket.

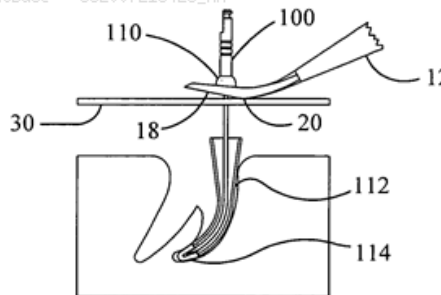
**Classifications:****International (IPC 8-9):** A61C1/14 A61C3/00 A61C3/02

A61D5/00 (Advanced/Invention);

A61C1/08 A61C3/00 A61C3/02 A61D5/00 (Core/Invention)

**CPC:** A61C1/145 A61C3/02 A61C3/14**European:** A61C1/14M A61C3/02 A61C3/14**US:** 433/152 433/152P

PatBase - US2007218423\_AA

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| DE602007038359 D1  | 20141009         | DE200760038359T    | 20070313         |
| EP1993465 A1       | 20081126         | EP20070872508      | 20070313         |
| EP1993465 A4       | 20100915         | EP20070872508      | 20070313         |
| EP1993465 B1       | 20140827         | EP20070872508      | 20070313         |
| US2007218423 AA    | 20070920         | US20060378856      | 20060316         |
| US7938645 BB       | 20110510         | US20060378856      | 20060316         |
| WO08097237 A1      | 20080814         | WO2007US06410      | 20070313         |

**Priority:**

US20060378856 20060316 EP20070872508 20070313 WO2007US06410 20070313

**Probable Assignee:** SAPIAN SCHUBERT L**Assignee(s):** (std): SAPIAN SCHUBERT L**Assignee(s):** SAPIAN SCHUBERT L GRAND PRAIRIE**Inventor(s):** (std): SAPIAN SCHUBERT L**Inventor(s):** SAPIAN SCHUBERT L FORT WORTH ; SAPIAN SCHUBERT**Agent(s):** WAGNER AND GEYER PARTNERSCHAFT MBB PATENT U RECHTSANWALTE; WAGNER KARL H; MORLAND C FISCHER; MORLAND C; FISCHER MORLAND C

**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**2) Family number: 56427445** (US2017065377A)

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**Title:** DENTAL IMPLANT

**Abstract:** It is disclosed a dental implant (130; 230; 330) for promoting bone growth. The dental implant comprises an elongated implant body having a coronal end portion (131; 231; 331) and an apical end portion (132; 232; 332), at least one external thread (140; 240; 340) and a flute arrangement having a depth. The flute arrangement has at least two helical flutes (150; 250; 350) that spiral in the general direction of said at least one external thread (140; 240; 340). The flutes (150; 250; 350) propagate with a greater lead than said at least one thread (140; 240; 340). The flute arrangement is capable of scraping off and transferring bone debris in the coronal direction of the implant during insertion. It is also disclosed a method of using the dental implant and an implant system according to the present invention.

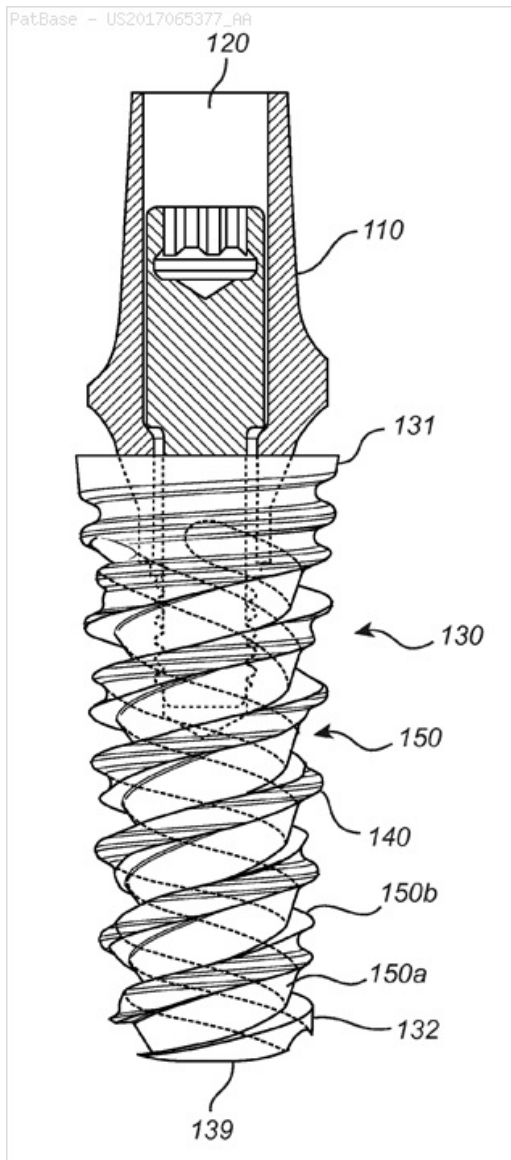
**Classifications:****International (IPC 8-9):** A61C A61C8/00

A61C8/02 (Advanced/Invention)

**CPC:** A61C8/0018 A61C8/0024 A61C8/0037 A61C8/0006

A61C8/0025 A61C8/0078 A61C8/008 A61C8/0022

**US:** 1/1 433/174

**Family:**

| Publication number | Publication date | Application number | Application date |
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| AU2015226158 AA    | 20160818         | AU20150226158      | 20150305         |
| AU2015226158 BB    | 20170223         | AU20150226158      | 20150305         |
| BR112016020573 A2  | 20170815         | BR20161120573      | 20150305         |
| CA2941483 AA       | 20160901         | CA20152941483      | 20150305         |
| CN106102649 A      | 20161109         | CN201580012278     | 20150305         |
| CN106102649 B      | 20191206         | CN201580012278     | 20150305         |
| EP3113717 A1       | 20170111         | EP20150710139      | 20150305         |
| GB2014004049 A0    | 20140423         | GB20140004049      | 20140307         |
| GB2523828 A1       | 20150909         | GB20140004049      | 20140307         |
| IN201637026953 A   | 20160826         | IN201637026953     | 20160808         |
| JP2017506950 T2    | 20170316         | JP20160551150T     | 20150305         |
| KR20160126082 A    | 20161101         | KR20167027832      | 20150305         |
| US2017065377 AA    | 20170309         | US20150123542      | 20150305         |
| WO15132323 A1      | 20150911         | WO2015EP54570      | 20150305         |
| ZA201605493 A      | 20180425         | ZA20160005493      | 20150305         |

**Priority:**

GB20140004049 20140307 WO2015EP54570 20150305

**Probable Assignee:** NOBEL BIOCARE SERVICES AG**Assignee(s):** (std): NOBEL BIOCARE SERVICES AG**Assignee(s):** HALL JAN ; KULLBERG FREDRIK**Inventor(s):** (std): HALL JAN ; KULLBERG FREDRIK**Inventor(s):** JAN HALL ; FREDRIK KULLBERG**Agent(s):** WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; FETHERSTONHAUGH AND CO; CAPRE DIDIER

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**Title:** MEDICAL DEVICE FOR REMOVING TOOTH FRAGMENTS

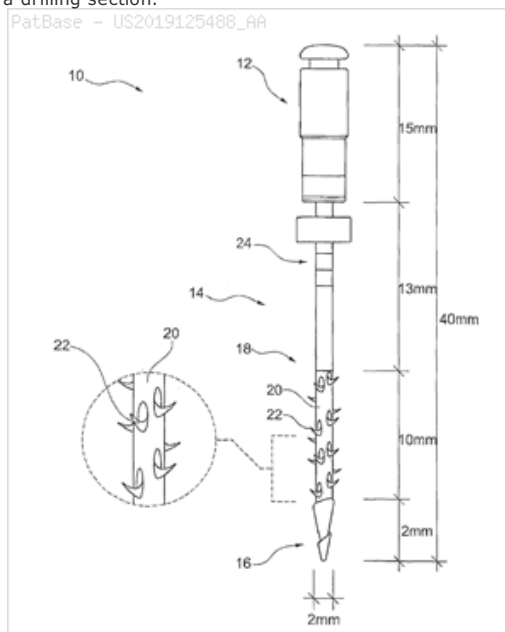
**Abstract:** A medical tool and a method for using the medical tool removes tooth fragments, in particular tooth roots and/or remainders of tooth roots, from a tooth socket or an alveole in the region of the jaw. The medical tool includes a base and a needle disposed on the base. The needle has a retentive section and a drilling section.

**Classifications:**

**International (IPC 8-9):** A61C3/02 A61C3/14 A61C5/42  
A61C5/46 (Advanced/Invention)

**CPC:** A61C3/02 A61C5/42 A61C3/14 A61C5/46

**US:** 1/1



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| BR112018071789 A2  | 20190219         | BR20181171789      | 20170517         |
| CN109219416 A      | 20190115         | CN201780033964     | 20170517         |
| CO20180011370 A2   | 20190118         | CO20180011370      | 20181025         |
| DE112017002749 A5  | 20190214         | DE201711002749T    | 20170517         |
| DE502016000956 D1  | 20180524         | DE201650000956T    | 20160603         |
| DK3251627 T3       | 20180813         | DK20160172861T     | 20160603         |
| EP3251627 A1       | 20171206         | EP20160172861      | 20160603         |
| EP3251627 B1       | 20180502         | EP20160172861      | 20160603         |
| EP3463170 A1       | 20190410         | EP20170728766      | 20170517         |
| ES2675014 T3       | 20180705         | ES20160172861T     | 20160603         |
| HR20181246 T1      | 20181005         | HR20180001246      | 20180801         |
| HU039028 T2        | 20181228         | HU20160172861T     | 20160603         |
| JP2019517368 T2    | 20190624         | JP20190516051T     | 20170517         |
| PL3251627 T3       | 20181031         | PL20160172861T     | 20160603         |
| PT3251627 T        | 20180703         | PT20160172861T     | 20160603         |
| RS57528 B1         | 20181031         | RS20180000905      | 20160603         |
| TR201809217 T4     | 20180723         | TR20180009217T     | 20160603         |
| US2019125488 AA    | 20190502         | US20170095783      | 20170517         |
| WO17206984 A1      | 20171207         | WO2017DE100423     | 20170517         |

**Priority:**

EP20160172861 20160603 DE201610119790 20161018 DE201710106576 20170328  
WO2017DE100423 20170517

**Probable Assignee:** GANSS RAINER

**Assignee(s):** (std): GANSS RAINER ; RAINER GANAY ; RAINER GANSS

**Assignee(s):** GANBETA RAINER

**Inventor(s):** (std): ULFAT DANIA ; GANSS RAINER ; DANIA ULFAT ; RAINER GANSS

**Inventor(s):** GANBETA RAINER

**Agent(s):** PATENTANWALTE THOEMEN AND KOERNER; LEHMANN MARIA ISABEL; MORITA HIROSHI; TOLGA CAYLAK; KOERNER ANDREAS ET AL

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**Title:** ELECTROLYTIC IMPLEMENT AND METHOD FOR REMOVING METAL PIECES LEFT IN ROOT CANALS OF TEETH

**Abstract:** In an electrolytic method of and implement for removing metal pieces left in root canals of teeth, a metal needle as the positive electrode and a metal pipe as the negative electrode are used to establish an electrolytic reaction within the root canals to dissolve the metal pieces. The metal pipe is fitted about the metal needle in such a way as to be adapted to slide back and forth on the needle. The metal needle and the metal pipe end has an outer surface, thereof except its tip portion, coated with an electrically insulating material, and a hole for supplying an electrolyte is formed within the metal

needle. An electrolytic cell is created in the root canal containing a metal piece by inserting the needle into the canal until it contacts the metal piece with the metal tube spaced above. Electrolyte is supplied to the root canal between the two electrodes (needle and tube) and a voltage is applied therebetween to dissolve the metal piece by electrolysis.

**Classifications:**

**International (ipc 8-9):** A61C19/06 A61C5/02 (Advanced/Invention);  
A61C19/00 A61C5/02 (Core/Invention)

**International (ipc 1-7):** A61C19/06 A61C3/00 A61C5/02

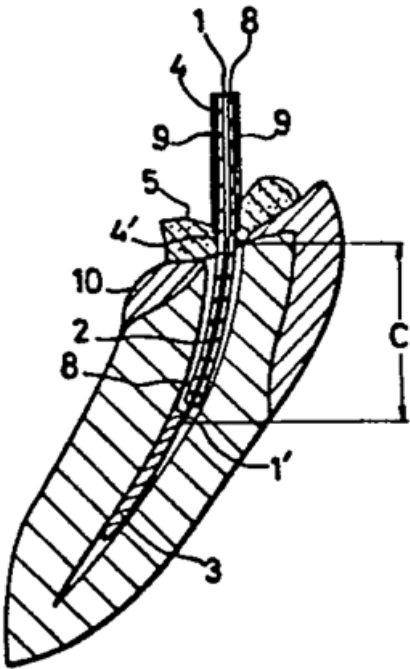
**CPC:** A61C5/46

**European:** A61C5/02B3

**US:** 204/224R 205/670 433/102 433/32

PatBase - US4337038\_R

FIG.3



**Family:**

| Publication number | Publication date | Application number | Application date |
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| DE3068065 D1       | 19840705         | DE19803068065      | 19801114         |
| EP0029689 A1       | 19810603         | EP19800304101      | 19801114         |
| EP0029689 B1       | 19840530         | EP19800304101      | 19801114         |
| JP1418489 C3       | 19871222         | JP19790148881      | 19791119         |
| JP56072861 A2      | 19810617         | JP19790148881      | 19791119         |
| JP62024099 B4      | 19870527         | JP19790148881      | 19791119         |
| US4337038 A        | 19820629         | US19800199368      | 19801021         |

**Priority:**

JP19790148881 19791119

**Probable Assignee:** EMU ESU KK

**Assignee(s):** (std): EMU ESU KK ; MS SURGICAL MFG CO LTD

**Assignee(s):** M S SURGICAL MFG CO ; M S SURGICAL MFG CO LTD ; M S SURGICAL MFG CO LTD A CORP OF JAPAN

**Inventor(s):** (std): SAITO TSUYOSHI ; OGIWARA MASARU ; SAITOU TAKESHI

**Inventor(s):** SAITO TAKESHI

**Designated states:** CH DE FR GB IT LI

**5) Family number: 34192765 (US2007031784A)**

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**Title:** ENDODONTIC REAMER / FILE HAVING REDUCED TORQUE DEMANDS

**Abstract:** A dental reamer/file is in the form of an elongated shank having a proximal end portion and a distal end and a tapered working portion of determined length extending therebetween, the external surface of the shank working portion having at least two equally spaced apart continuous concave helical flutes and therebetween an equal number of spiraled, spaced apart flanges, each flange having in a plane perpendicular to the length of a longitudinal axis of the shaft an outer end defined by a first and a second surface intersecting at a point of maximum radius from the axis, the first surface being relatively short and the second surface relatively longer, the point of maximum radius providing a spiraled scraping edge.

**Classifications:**

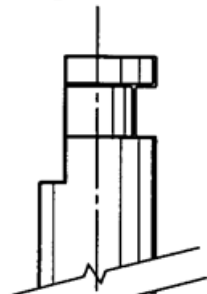
**International (ipc 8-9):** A61C5/02 (Advanced/Invention);  
A61C5/02 (Core/Invention)

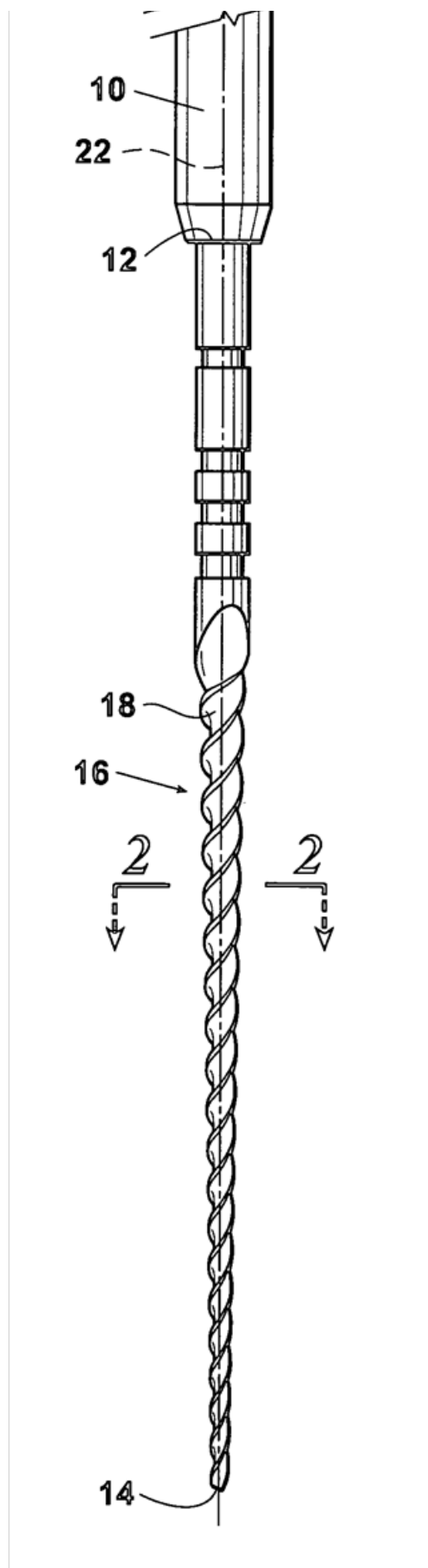
**CPC:** A61C5/42

**European:** A61C5/02B1

**US:** 433/102

PatBase - US2007031784\_RR





#### Family:

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| EP1749499 A1       | 20070207         | EP20060254036      | 20060801         |
| JP2007038007 A2    | 20070215         | JP20060210599      | 20060802         |
| US2007031784 AA    | 20070208         | US20050195101      | 20050802         |
| US7435086 BB       | 20081014         | US20050195101      | 20050802         |

**Priority:**

US20050195101 20050802

**Probable Assignee:** BERUTTI ELIO V G

**Assignee(s):** (std): BERUTTI ELIO V G ; BERUTTI ELIO VINCENZO GIOVANNI ; CANTATORE GIUSEPPE ; CASTELLUCCI ARNALDO

**Inventor(s):** (std): BERUTTI ELIO V G ; BERUTTI ELIO VINCENZO GIOVANNI ; CANTATORE GIUSEPPE ; CASTELLUCCI ARNALDO

**Inventor(s):** BERUTTI ELIO VG ; BERUTTI ELIO

**Agent(s):** YAMAZAKI KOSAKU; ONO SHINJIRO; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; GABLE AND GOTWALS; GABLE GOTWALS

**Designated states:** AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU

**6) Family number: 12421848 (EP1066800A2)**

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**Title:** Tool for removing tooth roots from jaw

**Abstract:** The tool has a needle (2) that can be guided into the root canal and a conically tapering extractor (3), which projects concentrically in front of the needle and has a central longitudinal bore (4). At least the free end of the extractor is formed as a threaded borer, so that when the needle is guided into the root canal, the extractor forms a positive connection with the root of the tooth.

**Classifications:**

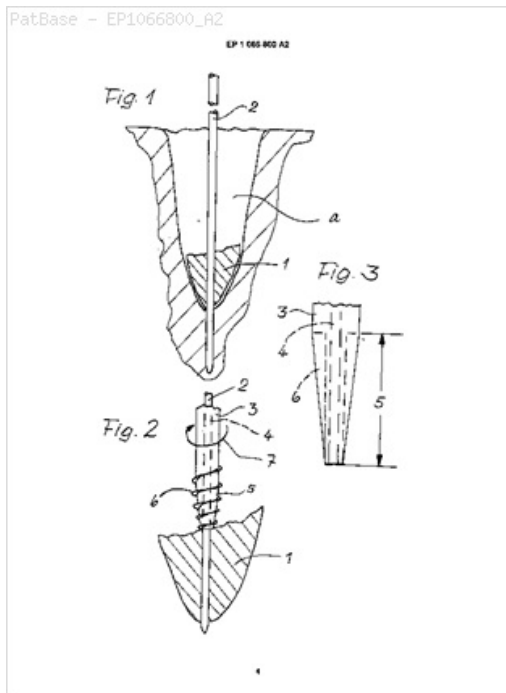
**International (IPC 8-9):** A61C5/02 (Advanced/Invention);

A61C5/02 (Core/Invention)

**International (IPC 1-7):** A61C3/14 A61C5/02

**CPC:** A61C3/14

**European:** A61C3/14



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| DE19931734 A1      | 20010111         | DE19991031734      | 19990708         |
| DE19931734 B4      | 20101007         | DE19991031734      | 19990708         |
| EP1066800 A2       | 20010110         | EP20000112369      | 20000609         |
| EP1066800 A3       | 20021211         | EP20000112369      | 20000609         |

**Priority:**

DE19991031734 19990708

**Probable Assignee:** ESSIGER HOLGER K DR

**Assignee(s):** (std): ESSIGER HOLGER K ; ESSIGER HOLGER K DR

**Inventor(s):** (std): ESSIGER HOLGER K ; ESSIGER HOLGER K DR

**Designated states:** AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

**7) Family number: 384228 (US3672058A)**

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**Title:** DENTAL IMPLANT

**Abstract:** Endo-osseous dental implant composed, in a single piece, of a stump intended to support a dental prosthesis and a self-drilling conical screw extended by a long sharp point and process of putting such an implant in position by screwing in the walls of the alveolar recess of a freshly extracted tooth root after it has been filled with autopolymerizable resin.

**Classifications:**

**International (IPC 8-9):** A61C13/30 A61C8/00 (Advanced/Invention);

A61C13/225 A61C8/00 (Core/Invention)

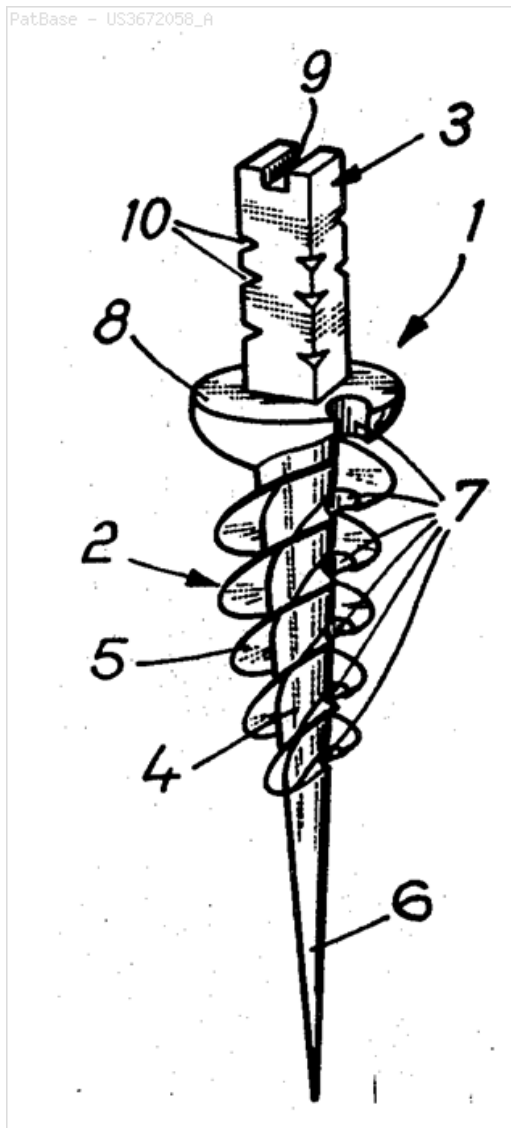
**International (IPC 1-7):** A61C13/00 A61C13/22 A61C8/00

**CPC:** A61C8/0022 A61C8/0048 A61C8/0075 A61C13/30 A61C8/00

**European:** A61C13/30 A61C8/00 A61C8/00F2 A61C8/00G

A61C8/00G2

**US:** 433/174

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| DE2018330 A1       | 19701029         | DE19702018330      | 19700416         |
| FR2040781 A5       | 19710122         | FR19690011366      | 19690418         |
| FR2079636 A6       | 19711112         | FR19700004374      | 19700206         |
| GB1301000 A        | 19721229         | GB19700018145      | 19700416         |
| US3672058 A        | 19720627         | US19700029072      | 19700416         |

**Priority:**

FR19690011366 19690418 FR19700004374 19700206

**Probable Assignee:** NIKOGHOSSIAN ALBERT**Assignee(s):** (std): ALBERT JEAN NIKOGHOSSIAN ; NIKOGHOSSIAN ALBERT JEAN ; NIKOGHOSSIAN ALBERT**Assignee(s):** ALBERT JEAN NIKOGHOSSIAN**Inventor(s):** (std): NIKOGHOSSIAN ALBERT JEAN ; NIKOGHOSSIAN ALBERT JEAN**Inventor(s):** ALBERT JEAN NIKOGHOSSIAN ; ALBERT JEAN NIKOGHOSSIAN**8) Family number: 11489996 (US5735689A)**

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**Title:** ENDODONTIC DENTAL INSTRUMENT

**Abstract:** The present invention is directed to improved endodontic dental instruments for extirpating and enlarging a root canal and methods for use thereof. The dental instruments of the invention include a helical radial land and a helical blade edge spaced from the land on its opposite sides by helical flutes. Dental instruments according to the invention exhibit improved and more balanced side cutting in curvilinear canals and non-circular canal areas such as fins or anastomosis canal regions.

**Classifications:**

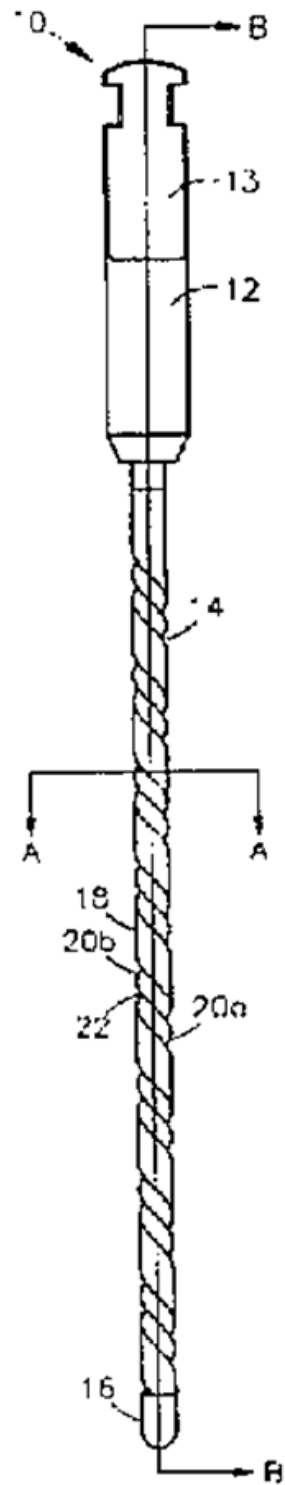
**International (IPC 8-9):** A61C1/00 A61C3/00 A61C3/02 A61C3/04  
A61C5/02 A61C5/04 A61C5/42 A61C5/50 (Advanced/Invention);  
A61C1/00 A61C3/02 (Advanced/Non-invention);  
A61C3/00 A61C5/02 A61C5/04 (Core/Invention);  
A61C1/00 (Core/Non-invention)

**International (IPC 1-7):** A61C1/02 A61C3/00 A61C3/02 A61C3/04  
A61C5/02

**CPC:** A61C5/42 A61C5/50 B23B2251/241 A61C1/003

**European:** A61C5/02B1 A61C5/04 K61C1/00C2B L23B251/24B

**US:** 433/102 433/224

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AT218047 E         | 20020615         | AT19960944309T     | 19961211         |
| AT322222 E         | 20060415         | AT19960125311T     | 19961211         |
| AU199714149 A1     | 19970703         | AU19970014149      | 19961211         |
| AU199726781 A1     | 19971112         | AU19970026781      | 19970423         |
| BRPI9611940 A      | 19991228         | BR1996PI11940      | 19961211         |
| CA2240172 AA       | 19980610         | CA19962240172      | 19961211         |
| DE69621464 D1      | 20020704         | DE19966021464      | 19961211         |
| DE69621464 T2      | 20030123         | DE19966021464T     | 19961211         |
| DE69636020 D1      | 20060518         | DE19966036020      | 19961211         |
| DE69636020 T2      | 20060824         | DE19966036020T     | 19961211         |
| DE69718161 D1      | 20030206         | DE19976018161      | 19970423         |
| DE69718161 T2      | 20031113         | DE19976018161T     | 19970423         |
| EP0893973 A1       | 19990203         | EP19960944309      | 19961211         |
| EP0893973 B1       | 20020529         | EP19960944309      | 19961211         |

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|-----------------|----------|----------------|----------|
| EP0895462 A1    | 19990210 | EP19970918754  | 19970423 |
| EP1184004 A2    | 20020306 | EP20010125311  | 19961211 |
| EP1184004 A3    | 20031210 | EP20010125311  | 19961211 |
| EP1184004 B1    | 20060405 | EP20010125311  | 19961211 |
| JP2000515395 T2 | 20001121 | JP19970522179T | 19961211 |
| JP2001526553 T2 | 20011218 | JP19970538233T | 19970423 |
| JP3731187 B2    | 20060105 | JP19970522179T | 19961211 |
| KR19990072083 A | 19990927 | KR19980704391  | 19961211 |
| US5735689 A     | 19980407 | US19950570642  | 19951211 |
| US5882198 A     | 19990316 | US19970885390  | 19970630 |
| US5902106 A     | 19990511 | US19980056251  | 19980407 |
| US5938440 A     | 19990817 | US19970844142  | 19970418 |
| US5980250 A     | 19991109 | US19950570283  | 19951211 |
| US6419488 BA    | 20020716 | US19960636608  | 19960424 |
| WO9721392 A1    | 19970619 | WO1996US19712  | 19961211 |
| WO9739696 A1    | 19971030 | WO1997US06606  | 19970423 |

#### Priority:

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|----------------|----------|---------------|----------|---------------|----------|
| US19950570283  | 19951211 | US19950570642 | 19951211 | US19960636608 | 19960424 |
| EP19960944309  | 19961211 | WO1996US20463 | 19961211 | WO1996US19712 | 19961211 |
| US19970041740P | 19970328 | US19970844142 | 19970418 | WO1997US06606 | 19970423 |
| US19970885390  | 19970630 | US19980056251 | 19980407 |               |          |

**Probable Assignee:** ORMCO CORP

**Assignee(s):** (std): MCSPADDEN JOHN T ; ORMCO CORP ; TYCOM DENTAL CORP ; TYDOM DENTAL CORP ; TAYLOR TIM L ; ORMCO CORP ORANGE

**Assignee(s):** UNION BANK ; ORMCO ORANGE CORP ; ABN AMRO BANK NV ; CREDIT SUISSE FIRST BOSTON ; FLEET CAPITAL AGENT AS CORP ; FLEET CAPITAL AGENT CORP AS ; FLEET CAPITAL CORP

**Inventor(s):** (std): TIM L TAYLOR ; JOHN T MCSPADDEN ; MCSPADDEN JOHN T ; TAYLOR TIM L

**Inventor(s):** TAYLOR L ; MCSPADDEN T

**Agent(s):** GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP

**Designated states:** AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN

#### 9) Family number: 13432386 (DE19708870A1)

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**Title:** MEDICAL TOOL FOR FIXING AND REMOVING OBJECTS SUCH AS TOOTH ROOTS, JAW BONES, MANDIBULAR CHANNELS ETC.

**Abstract:** The tool (1) has an element (3) located on its end side for fixing and removing objects, where several retentive elements (4) are formed on the element which wedge, clamp, hook or adhere in bores made in the respective objects after the element has been inserted. The element is built as a friction element whose top surface is smooth, roughened or coated. The retentive elements may be built as a barb or a threaded element. a hardenable substance may be applied to the element, whereby the substance hardens in the object to enable the element to fix to it. The element is either rigidly or flexibly connected to the tool. The element may be removably attached to the tool.

#### Classifications:

**International (IPC 8-9):** A61C3/14 A61C5/02 (Advanced/Invention);

A61B17/00 A61B17/88 (Advanced/Non-invention);

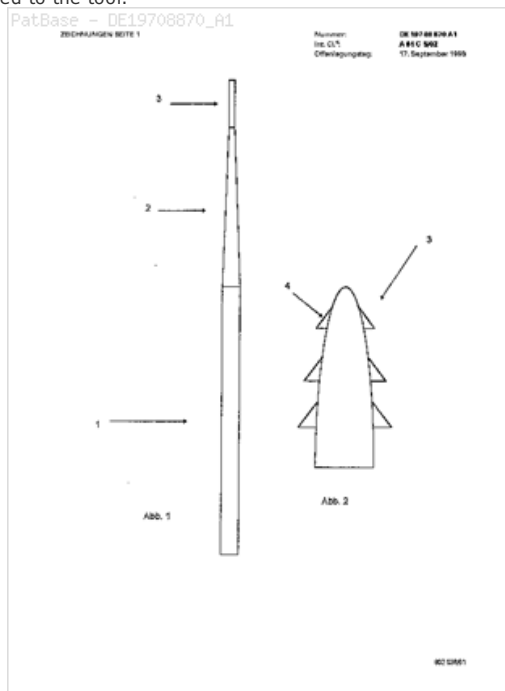
A61C3/00 A61C5/02 (Core/Invention);

A61B17/00 A61B17/88 (Core/Non-invention)

**International (IPC 1-7):** A61B17/50 A61C5/02

**CPC:** A61C5/40 A61C3/14 A61B2017/00349

**European:** A61C3/14 A61C5/02 K61B17/00E5



#### Family:

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| DE19708870 A1      | 19980917         | DE19971008870      | 19970305         |
| DE19708870 C2      | 19990715         | DE19971008870      | 19970305         |

#### Priority:

DE19971008870 19970305

**Probable Assignee:** MEINERT JOERG DR  
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**Inventor(s): (std):** MEINERT JOERG DR

**10) Family number: 32562784 (DE202005007267U1)**

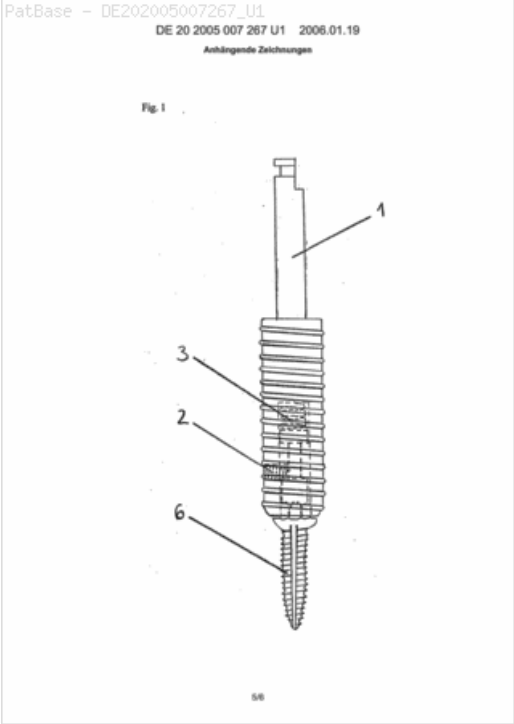
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**Title:** INSTRUMENT KIT FOR USE IN COMMERCIAL DENTAL MEDICINAL ANGULAR PIECE, HAS SCREW DRILL AND SCREW BUSHING HELD TOGETHER BY RETAINING SCREW WHERE DRILL HAS CUTTING DRILL PORTION WHICH IS PRESSED ONTO TOOTH ROOT TO REMOVE RESIDUE IN IT

**Abstract:** The kit has a screw drill inserted into a screw bushing and held together by a retaining screw (2), where the kit is made from rust free and sterilizable steel alloy or from titanium. The drill has a cutting drill portion which is pressed onto tooth root to remove residue in it, during which an inner polygon (5) of drill and outer polygon (4) of bushing rest into one another and the drill and bushing are blocked. A spiral spring presses the drill and the bushing in order to release the polygons. An independent claim is also included for a lever comprising an inner screw.

**Classifications:**

**International (IPC 8-9):** A61B17/50 A61C3/14  
A61C5/02 (Advanced/Invention);  
A61B17/50 A61C3/00 A61C5/02 (Core/Invention)  
**CPC:** A61C5/46 A61C3/00 A61C3/14  
**European:** A61C3/00 K61C3/14 K61C5/02B3



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| DE202005007267 U1  | 20051215         | DE200520007267U    | 20050506         |

**Priority:**

DE200520007267U 20050506

**Probable Assignee:** GUSE CARSTEN  
**Assignee(s): (std):** GUSE CARSTEN

**11) Family number: 30516487 (US2004081940A)**

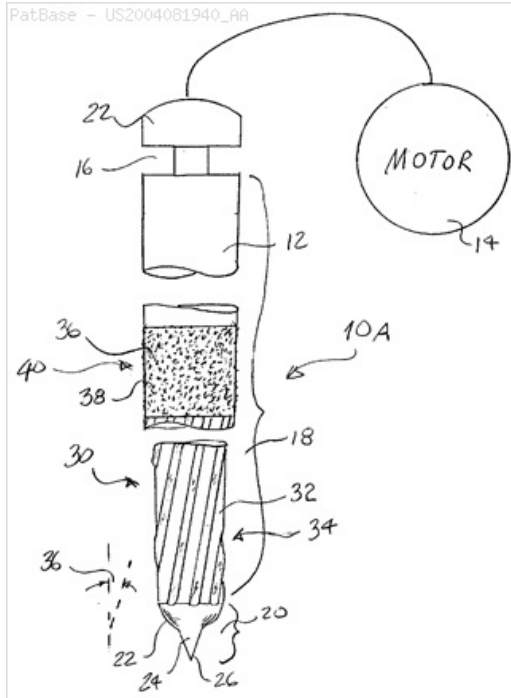
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**Title:** DENTAL BUR

**Abstract:** A dental bur structure including a rotatable shaft turned by a motor. The shaft possesses a proximal portion having a fluted surface. The bur also possesses a distal portion with a smooth surface tip which generates heat to melt a composite post matrix upon activation of the shaft. The fluted surface removes a composite material while the smooth tip serves as a guide for the bur.

**Classifications:**

**International (IPC 8-9):** A61C13/30 A61C3/02 A61C5/02 A61C5/42  
A61C5/46 (Advanced/Invention);  
A61C13/30 (Advanced/Non-invention);  
A61C3/02 (Core/Invention);  
A61C13/225 (Core/Non-invention)  
**International (IPC 1-7):** A61C3/02  
**CPC:** Y10T408/892 A61C5/42 A61C3/02 A61C13/30  
**European:** A61C3/02 A61C5/02B1 A61C5/02B3 K61C13/30  
**US:** 408/200 433/165 433/165P 606/80

**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AU2003293390 AA    | 20040630         | AU20030293390      | 20031203         |
| AU2003293390 AH    | 20040630         | AU20030293390      | 20031203         |
| CA2500644 AA       | 20040624         | CA20032500644      | 20031203         |
| CA2500644 C        | 20110524         | CA20032500644      | 20031203         |
| EP1587439 A2       | 20051026         | EP20030790337      | 20031203         |
| EP1587439 A4       | 20080319         | EP20030790337      | 20031203         |
| US2004081940 AA    | 20040429         | US20030729572      | 20031203         |
| US6902400 BA       | 20050607         | US20020274568      | 20021018         |
| US7347692 BB       | 20080325         | US20030729572      | 20031203         |
| WO04052226 A2      | 20040624         | WO2003US38569      | 20031203         |
| WO04052226 A3      | 20040910         | WO2003US38569      | 20031203         |

**Priority:**

US20020274568 20021018      US20020431146P 20021205      WO2003US38569 20031203  
 US20030729572 20031203

**Probable Assignee:** MTI PRECISION PRODUCTS LLC

**Assignee(s):** (std): FELDMAN MICHAEL ; ROETZER PATRICK ; ROETZER PATRICK L

**Assignee(s):** MTI PRECISION PRODUCTS INC ; MTI PRECISION PRODUCTS LLC

**Inventor(s):** (std): ROETZER PATRICK L ; FELDMAN MICHAEL

**Inventor(s):** MICHAEL FELDMAN ; PATRICK L ROETZER

**Agent(s):** FETHERSTONHAUGH AND CO; BIELEN JR THEODORE J; THEODORE J

**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW