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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

David J. Kayros

Director of the United States Patent and Trademark Office

(12) United States Patent
Chao

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(54) PERIODONTAL SURGERY OPERATION METHODS AND INSTRUMENTS

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 155 days.

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(58) Field of Classification Search 433/141-145, 433/25; 606/167

See application file for complete search history.

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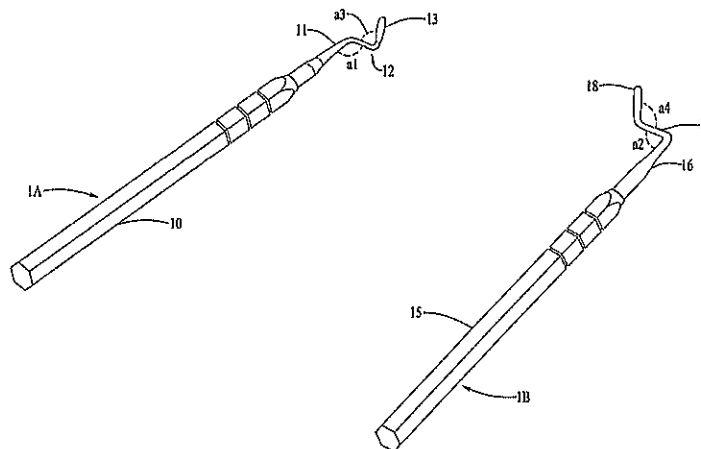
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(57) ABSTRACT

The present invention relates generally to methods of performing periodontal surgeries, and instruments for performing said surgeries. A method of performing periodontal surgery to correct a gingival defect of a patient according to a general embodiment comprises the steps of making an incision at or near a fornix of the patient near the gingival defect, inserting an instrument into the incision to detach a flap, advancing the flap horizontally without enlarging the incision, elevating a papilla within the flap, stretching the flap to cover the gingival defect, and pressing against the flap to promote fibrin formation. An instrument for performing periodontal surgery according to one general embodiment comprises a handle, a first shank connecting to and extending from the handle, a connector section, and a blade section. The connector section further comprises a first end and a second end, wherein the first end connects to the first shank at a first angle, and the second end connects to the blade section at a second angle. Further, the blade section is approximately perpendicular to a plane formed by the handle and the connector section, and a cutting surface of the blade section is parallel to the second end of the connector section.

34 Claims, 16 Drawing Sheets



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Photo (1): Dental Instruments ("Goldman Knife"); Photo (2): Dental Instruments ("Goldman Knife"); Photo (3) Dental Instruments ("Goldman Knife"); Photo (4): Angled Dental Instruments; Photo (5): Dental Instruments; Photo (6): Angled Dental Instruments; Photo (7): Angled Dental Instruments; Photo (8): Dental Instruments.
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