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Kopelman et al.

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(45) **Date of Patent:** Jan. 18, 2005

(54) **DENTAL IMAGE PROCESSING METHOD AND SYSTEM**

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(75) Inventors: **Avi Kopelman**, Tel Aviv (IL); **Eldad Taub**, Reut (IL)

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(73) Assignee: **Cadent Ltd.**, Or Yehuda (IL)
(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 479 days.

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(21) Appl. No.: **09/830,264**

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International Search Report for International Application No. PCT/IL 99/00577, mailed on Feb. 17, 2000.

(65) **Prior Publication Data**

An English language title and abstract is provided for DE 4141311.

US 2003/0169913 A1 Sep. 11, 2003

Related U.S. Application Data

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(63) Continuation of application No. PCT/IL99/00577, filed on Nov. 1, 1999.

Primary Examiner—Todd E. Manahan

(30) **Foreign Application Priority Data**

(74) *Attorney, Agent, or Firm*—Nath & Associates P.I.I.C.; Gary M. Nath; Lee C. Heiman

Nov. 1, 1998 (IL) 126838

(57) **ABSTRACT**

(51) **Int. Cl.⁷** **G06K 9/00**

An image processing method for use in dentistry or orthodontic is provided. Two images of teeth, one being a two-dimensional image and one a three-dimensional image are combined in a manner to allow the use of information obtained from one to the other. In order to combine the two images a set of basic landmarks is defined in one, identified in the other and then the two images are registered.

(52) **U.S. Cl.** **382/154; 382/294; 128/922**

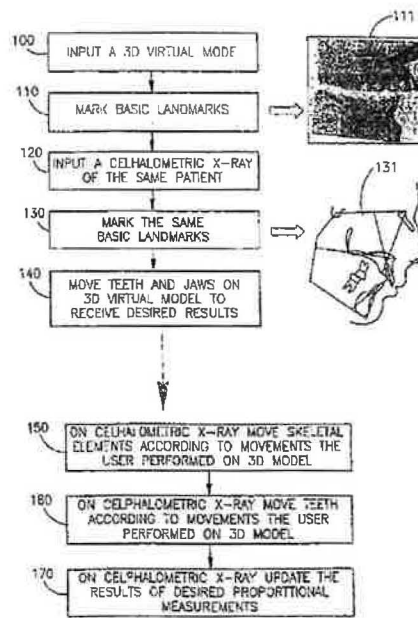
(58) **Field of Search** 382/128, 131, 382/154, 285, 294; 600/587, 589, 590; 128/922; 433/24, 29, 68, 69, 215

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23 Claims, 11 Drawing Sheets

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exocad GmbH, et. al.
Exhibit 1008

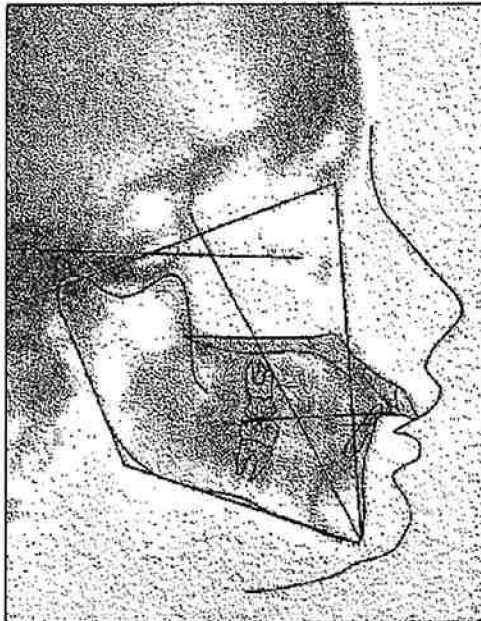


FIG. 1A

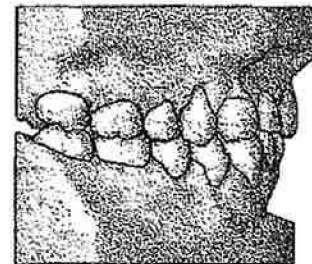


FIG. 1B

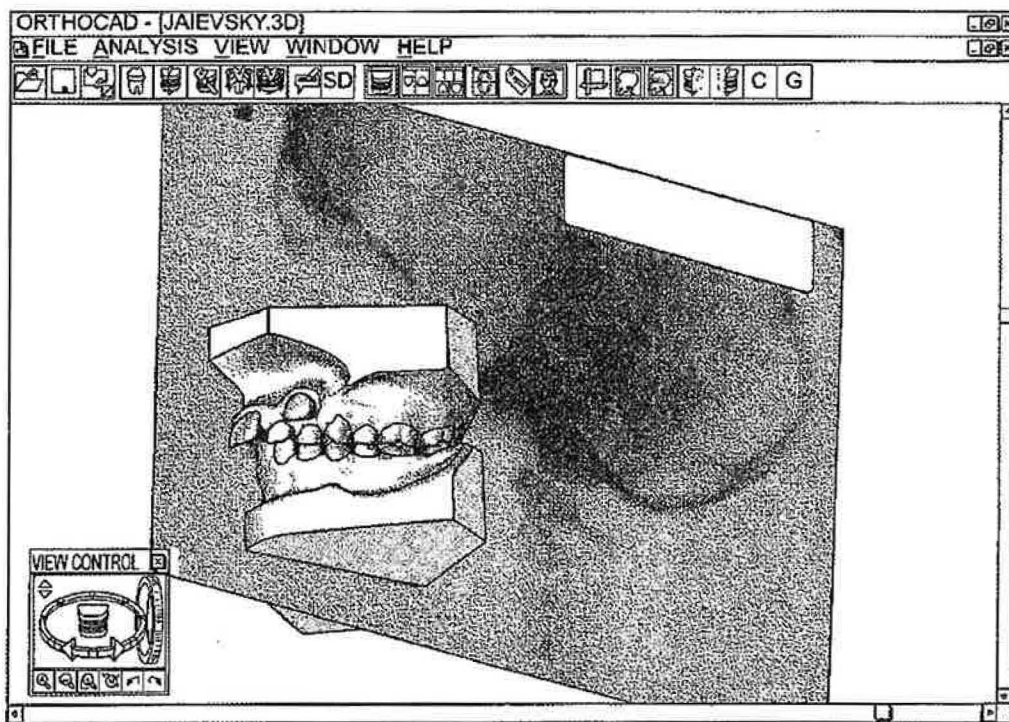


FIG. 2



FIG. 3

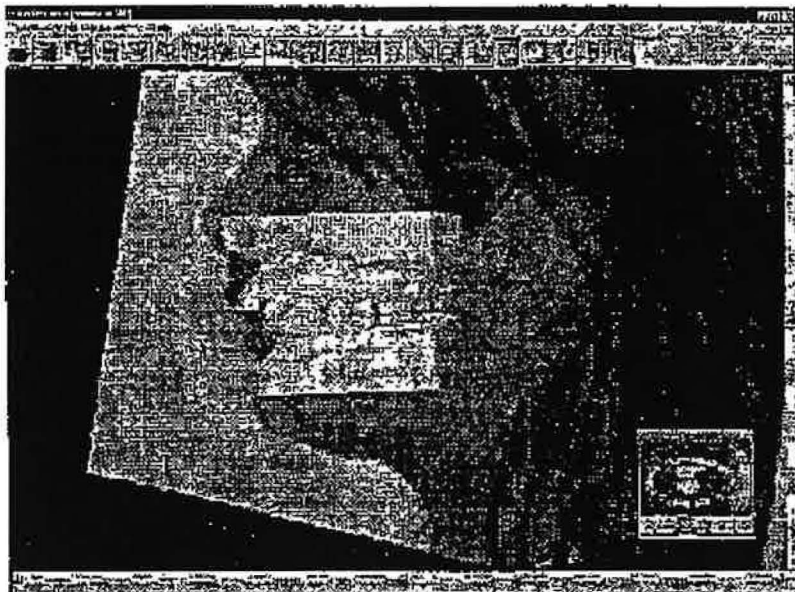


FIG.3A

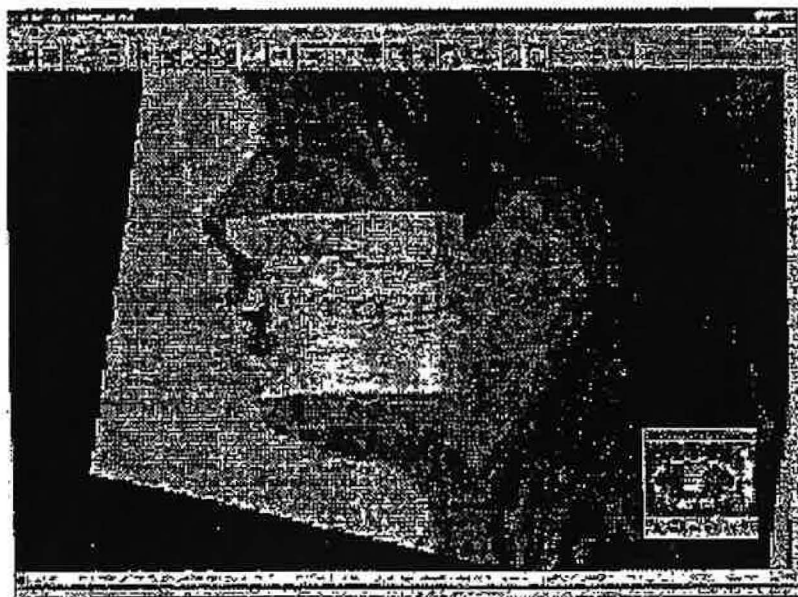


FIG.3B

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