Title (en)

ODONTO-NAVI-ROBOT FOR PRECISION POSITIONING IMPLANTS IN THE ORAL CAVITY

Title (de)

ODONTO-NAVI-ROBOTER ZUR PRÄZISEN POSITIONIERUNG VON IMPLANTATEN IN DER MUNDHÖHLE

Title (fr)

ROBOT ODONTO-NAVI POUR LE POSITIONNEMENT DE PRÉCISION D' IMPLANTS DANS LA CAVITÉ ORALE

Publication

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Application

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Abstract (en)

[origin: WO2008050372A2] The present invention describes a guiding system for precision positioning of the implants in the oral cavity. Presently implant positioning is performed manually by the doctor and requires high skill, having to take into account both position in which the implant should be placed for optimal prosthesis support, but also, even more importantly, of the amount of bone stock available. Purpose of the present invention is to supply a guide to precision position in predetermined positions on the base of a CAT scan, in order to insure reaching both objectives. The equipment integrates with that described in the Italian patent application CS2006A00014, deposited on 26/10/2006, in which a Navigator-Robot system is described able to move along the denture's plane in order to detect the denture's CAD model, and allows to rotate in two directions a slide made for guiding the micro motor in the direction pre-established, being placed on the same planar 2 DOF system quoted above, able to be used both in active and passive mode, and being the entire 2 + 2 DOF system fixed to the head or the jaw of the patient using a 6 DOF self balanced system. Finally such 2 DOF system to control inclination may consist both in a serial or in a parallel robot, being the last probably preferable for its greater rigidity and precision control.

IPC 8 full level

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