# METHOD AND SYSTEM OF OCCLUSION FORCES MEASUREMENT AND ALIGNMENT

This invention discloses a system and method which captures information for virtual deployment of occlusal forces, and project said occlusal forces onto automatically aligned digital casts of the user's denture.

#### TYPE OF DEVELOPMENT

Diagnostic, planning and treatment device.

## **DESCRIPTION**

Occlusion analysis is essential on dentistry and nowadays different systems are on the market. However, it is needed to have all the contacts and forces on the patient's digital casts over time, while the patient is moving the mandible. This information is really useful for dental diagnostic, planning and treatment.

The invention relates to a device for capturing information for virtual deployment and method associated with it, which comprises a force sensor for locating the occlusal contacts and forces, and an optical scanning device (intraoral or extraoral). The scanner digitizes the arcades and using a virtual occlusal registration (virtual bite) locates the geometric occlusal contacts in maxilary and mandibular arcades. In conjunction, occlusal contacts and forces are projected onto the patients´ individual three-dimensional digital casts over time.

#### INDICATION

Sector of dental instruments, especially, in the industrial area engaged in providing tools for retrieving dental occlusion information for:

- Diagnosis of dental cases.
- Planning of dental cases.
- Treatment of dental cases.

The methodology provided by this patent could be used as individualized visualization of occlusal contacts and forces over time on patient's individual teeth.

## **NOVELTY/ADVANTAGE**

- Currently, there is no device to visualize occlusal forces over the individual teeth of the patients correctly aligned.
- Easy-to-use method.

Reference: OcclusionForce (18BIO04)



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# Research group:

Dental Engineering.

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#### **IPR STATUS**

# **European Patent Application:**

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# Applicant:

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# **COOPERATION GOAL**

Company interested in the license and commercialisation of the development.