

# Cleaning attachment for biofilm removal - Galvoclean

Dental medicine, periodontology, scaler, cleaning, prophylaxis, biofilm

# DESCRIPTION OF TECHNOLOGY

Effective removal of biofilm is essential for good oral health. Inflamed gum pockets are more difficult to clean due to their nature. This can lead to reinfection and disease recurrence.

The cleaning attachment presented here complements conventional procedures by introducing an electric current and an irrigation and electrolyte solution. The electrolysis complements and enhances both the local cleaning effect and the bactericidal effect. This creates optimal conditions for the complete elimination of the biofilm and the healing of the disease.



The working end has two electrodes and can be a tip or thin spatula depending on the application section. By means of curvature and bending, both the lower and upper jaw can be treated.

The attachment can be connected to an ultrasonic handpiece to enhance the cleaning effect, especially for the removal of calcified biofilm sections.

# APPLICATION FIELDS

- Dental hygiene
- Prophylaxis
- Periodontal therapy

# AT A GLANCE ...

#### **Application Fields**

- Periodontology
- Prophylaxis

#### **Business**

- Dental technology
- Dental practices

## USP

- Enhanced cleaning and antibacterial effect
- Application also for nonconductive areas (e.g. gums etc.)
- Ultrasonic add-on possible

#### **Development Status**

A prototype will be developed

#### **Patent Status**

Priority application filed on 30.01.2023 with the European Patent Office.

## ADVANTAGES OVER THE PRIOR ART

- Electrolysis complements and intensifies the local cleaning and antibacterial effect
- Can be supplemented with an ultrasonic handpiece
- Even non-conductive areas (e.g. gums, teeth, nonmetallic implants) can be cleaned

## STATE OF THE PRODUCT DEVELOPMENT

Formulated concept. Currently no prototype.

#### MARKT POTENTIAL

The prevalence of periodontal diseases in Germany is more than 50% and the need for periodontal therapy and prophylaxis will continue to increase due to demographic developments.<sup>1</sup>

# **COOPERATION OPPORTUNITIES**

On behalf of Justus-Liebig-Universität Gießen, TransMIT GmbH is looking for cooperation partners or licensees worldwide.

<sup>1</sup> Jordan, A. R. (2018). Die Fünfte Deutsche Mundgesundheitsstudie (DMS V). Prophylaxe Impuls 2018, 22: 72-75.

https://www.idz.institute/fileadmin/Content/Publikationen-PDF/Jordan-2018-Die Fuenfte Deutsche Mundgesundheitsstudie.pdf

## A TECHNOLOGIE OF



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