

Title (en)

SYSTEM FOR MEASURING PROTEOLYTIC ACTIVITY OF PERIODONTOPATHOGENIC BACTERIA.

Title (de)

SYSTEM ZUR MESSUNG DER PROTEOLYTISCHEN AKTIVITÄT VON PERIODONTOPATHOGENEN BAKTERIEN.

Title (fr)

SYSTEME DE MESURE DE L'ACTIVITE PROTEOLYTIQUE DES BACTERIES PARODONTOPATHOGENES.

Publication

**EP 0642587 A4 19970319 (EN)**

Application

**EP 92913226 A 19920522**

Priority

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- US 9204333 W 19920522
- US 38597789 A 19890726
- US 63492490 A 19901224

Abstract (en)

[origin: WO9324651A1] A colorimetric assay detects the presence of proteolytic activity in a specimen of subgingival plaque, for example, with a chromogenic test substance which is hydrolyzed by trypsin-like enzymes produced by periodontopathogenic bacteria in the specimen to release a chromophore. Release of the chromophore is associated with a visible color change and is indicative of the presence of periodontal disease. The results of this chromogenic assay for proteolytic activity are reliable provided at least a minimum number of microorganisms, on the order of 1,000,000 to 10,000,000, are present in the specimen. The colorimetric assay of the present invention indicates whether the specimen includes the requisite number of microorganisms so that false negative results are not occasioned as a result of inadequate specimen size. A nonspecific marker of enzymatic activity of microorganisms in the specimen, illustratively phosphatase or peptidase enzymes, indicates specimen size sufficiency by the release of a chromophore from a nonspecific chromogenic test substance, in response to the nonspecific enzymatic activity.

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Citation (search report)

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- [A] W.J. LOESCHE ET AL.: "Multi-center clinical evaluation of a chairside method for detecting certain periodontal disease.", JOURNAL OF PERIODONTOLOGY, vol. 61, no. 3, 1990, ANN ARBOR MI USA, pages 189 - 196, XP002023003
- See references of WO 9324651A1

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EP2418394A1; US8591112B2

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