

**Sleep Apnea Diagnostic Device (Mor)**

Yehouda Finkelstein, Meir Medical Center, ENT

**Name of Project:** Sleep Apnea Diagnostic Device

**Inventors:** Professor Yehuda Finkelstein

Professor Lior Wolf (Tel Aviv University)

**Medical Center:** Meir Medical Center

**Field of Invention:** Objective diagnosis of obstructive sleep apnea based on the identification and analysis of anatomic anomalies in the upper airways

**Technology:** A software program that can be installed on the computer of any physician dealing with sleep disorders. When presented with the cephalometric images taken in the same type of laboratory that currently produces such images for orthodontic analysis, the software automatically analyzes the results and displays the areas with anatomical anomalies. The examining physician can then make an objective decision on the type of treatment or surgery necessary.


**Market:** About 100 million people worldwide are suspected of having obstructive sleep apnea, of which more than 80% remain undiagnosed. U.S. revenues in the sleep apnea diagnostic and therapeutic devices market totaled approximately \$1.35 billion in 2008, with a 16.2 percent growth rate (Frost & Sullivan, 2010).

**Advantages:** For the first time, diagnosis of obstructive sleep apnea is provided through accurate, objective analysis of physical underlying anomalies and indications for the optimal treatment of the problem offered.

**Patent Status:** Patent application pending

**Development Status:** A prototype system that can automatically detect and localize anatomical feature points as well as soft structures such as the tongue has been developed. The system is able to provide a clear validation of the link between anatomical structure and obstructive sleep apnea.

**Contact for more information:**

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