Technology Opportunity, Ref. No. UA-27/077

Self-Retaining Mirror for Standardized Palate Documentation

This patent-pending intraoral mirror addresses key challenges in oral cavity documentation. Its self-retaining, fog-free design enables consistent, high-quality imaging and allows precise measurements directly on photographs - without the need for assistance.

Keywords intraoral mirror device, cleft lip and palate imaging, self-retaining dental mirror standardized oral cavity imaging

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Background Documenting patients with cleft lip and palate (CLP) poses significant challenges, especially in achieving consistent, high-quality imaging throughout long treatment periods. Conventional intraoral mirrors require an assistant to retract lips and cheeks and often produce inconsistent views. Moreover, accurate distance measurements on the resulting images are not feasible, limiting their use for objective treatment analysis. These limitations lead to increased personnel demands and hinder standardized documentation—particularly in plastic and reconstructive surgery.

Invention This novel intraoral mirror device addresses key limitations of traditional imaging tools used in CLP treatment. It features an integrated self-retraction mechanism and a planar mirror surface that enables stable and reproducible visualization of the palate. Designed for single-person operation, the device significantly improves image quality and consistency. Crucially, it allows precise distance measurements directly on the captured images, supporting objective treatment monitoring. The technology is patented and available for licensing to medical device manufacturers and clinical institutions.

Fields of Use Orthodontics and dentistry, craniofacial surgery, standardized oral cavity documentation

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